Providence

Providence Digital Commons

Articles, Abstracts, and Reports

Summer 2018

Digital Health Practices, Social Media Use, and Mental Well-Being Among Teens and Young Adults in the U.S.

Victoria Rideout

Susannah Fox

Well Being Trust

Follow this and additional works at: https://digitalcommons.providence.org/publications

Part of the Behavioral Medicine Commons, Mental and Social Health Commons, and the Pediatrics Commons

Recommended Citation

Rideout, Victoria; Fox, Susannah; and Well Being Trust, "Digital Health Practices, Social Media Use, and Mental Well-Being Among Teens and Young Adults in the U.S." (2018). *Articles, Abstracts, and Reports*. 1093.

https://digitalcommons.providence.org/publications/1093

This Article is brought to you for free and open access by Providence Digital Commons. It has been accepted for inclusion in Articles, Abstracts, and Reports by an authorized administrator of Providence Digital Commons. For more information, please contact digitalcommons@providence.org.



Digital Health Practices,
Social Media Use,
and Mental Well-Being
Among Teens and Young
Adults in the U.S.

By Victoria Rideout, M.A. and Susannah Fox

Introduction		4
Key Findings		9
Methodology		22
Digital Health Practices		29
Digital Health Practices Among Teens and Young Adults Online Health Information Searches Mobile Health Apps Connecting to Health Providers Online Peer to Peer Health Online	30	
Demographic Differences in Digital Health Use Differences by Age Differences by Gender Differences by Race or Ethnicity Differences by Sexual Orientation	35	
In Their Own Words Young People, Online Health Information, and Peer Health Resources	40	
In Their Own Words Teens and Young Adults Share About Their Favorite Mobile Health Apps	43	
Digital Health Use and Depression Online Health Information Searches Among Young People With Depressive Symptoms Mobile Health App Use Among Young People with Depressive Symptoms Connecting to Health Providers Online by Young People with Depressive Symptoms Peer to Peer Health Online Among Young People with Depressive Symptoms	46	
In Their Own Words	50	

Hopelab & Well Being Trust 2

Young People, Depression, and Online Health Resources

Social Media and Mental Well-Being		53
Social Media Use Among Teens and Young Adults Frequency of Social Media Use Top Social Media Sites Used Importance of Social Media Specific Actions Taken on Social Media Positive and Negative Experiences and Reactions to Social Media Use of Social Media When Feeling Depressed, Stressed, or Anxious	57	
Social Media Use Among Young People With and Without Depressive Symptoms Frequency of Social Media Use, by Depressive Symptoms Use of Specific Platforms, by Depressive Symptoms Importance of Social Media, by Depressive Symptoms Specific Actions Taken on Social Media, by Depressive Symptoms In Person vs. Online Communication, by Depressive Symptoms Positive and Negative Experiences and Reactions to Social Media, by Depressive Symptoms Response From Others Online Drama Reaction to News Content and Using Social Media to Avoid Problems Self-presentation and Comparison to Others Use of Social Media When Feeling Depressed, Stressed, or Anxious	63	
In Their Own Words Teens and Young Adults on the Positive Aspects of Using Social Media When Feeling Depressed, Stressed, or Anxious	71	
In Their Own Words Teens and Young Adults on the Negative Aspects of Using Social Media When Feeling Depressed, Stressed, or Anxious	74	
Conclusion		77
Appendix		81
Acknowledgements		94

Introduction

This report presents the first set of descriptive findings from a nationally representative, probability-based survey of more than 1,300 U.S. teens and young adults, ages 14 to 22, conducted in February and March 2018. This initial report focuses on two main topics: first, young people's self-described use of online health information and digital health tools, including those used for peer-to-peer health exchanges; and second, the associations between self-reported social media use and mental well-being among teens and young adults (TYAs).

Teen and Young Adult Use of Digital Health Resources

The internet and digital tools such as social media and mobile apps have revolutionized consumers' access to health information and resources. Millions of American adults go online to research their latest diagnosis, check their symptoms, find a health provider, or explore the side effects of various prescription drugs. The market in health apps has exploded, keeping phones and smart watches busy monitoring heart rates, sleep patterns, and calorie counts. And social media has enabled connections between people facing similar health challenges, no matter who or where they are, in a way that may be taking peer-to-peer health communication to a new level.

But most of the research about digital health has focused on adults, and most of the national dialogue around young people and technology has been about health *risks* rather than health *promotion*. The current generation of teens and young adults are online and on their devices more than any other age group, and they face a myriad of health challenges ranging from anxiety to birth control to obesity. In the past, the Pew Research Center conducted ongoing tracking surveys about adult Americans' use of online health tools; the data they provided were of great use to health providers, patient advocates, policymakers, and tech companies. We now offer this initial portrait of young people's digital health practices and hope these data will prove equally useful. Among the topics covered are:

- What proportion of teens and young adults (TYAs) report having gone online to look for information on physical and mental health issues, and on what topics? Do they perceive the information to be useful?
- What proportion report having used online tools to connect with "health peers" - people sharing health conditions similar to their own? How useful were those connections?
- What percentage of young people report watching, listening to, or reading other people's health stories via the internet? How many have shared their own?

For example, the Pew Research Center's tracking surveys about health and technology were conducted among adults age 18 and older, including Mobile Health 2010 by Susannah Fox (http://pewinternet.org/ Reports/2010/Mobile-Health-2010.aspx) and Health Online 2013 by Susannah Fox and Maeve Duggan (http://www. pewinternet.org/2013/01/15/health-online-2013/). One exception is a 2015 survey conducted by Northwestern University's Center on Media and Human Health titled Teens, Health, and Technology: A National Survey (cmhd.northwestern.edu/ wp-content/uploads/2015/05/1886_1_ SOC_ConfReport_TeensHealth-Tech_051115.pdf). For an example of public press about the health risks of technology see Jean M. Twenge's "Have Smartphones Destroyed a Generation," in the September 2017 issue of The Atlantic (https://www.theatlantic.com/magazine/ archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/).

- What proportion of youth say they have tried health-related mobile apps, and on what topics? How useful did they feel those apps were?
- And how does use of digital health tools vary among young people, such as by age, gender, race/ethnicity, or sexual orientation?

Social Media Use and Mental Well-being

Recent reports of an increase in adolescent depression are deeply concerning.² Clearly there are a multitude of factors that may be contributing to this disturbing trend. One issue that many observers worry about is the possibility that young people's use of social media may be contributing to the rise in adolescent depression.³ In addition, there are questions about whether social media is leading teens and young adults to feel "less than" their peers, whether they feel lonely and left out by seeing other friends together online, whether they are being victimized by negative comments that exacerbate negative emotions. These concerns are prompting much-needed research in this area, and highlighting the need to better understand both the wide variety of activities young people are engaging in on social media, and how those media are perceived by young people themselves. All the while, the "pull" of these social technologies for young people seems undeniable. This is leading some researchers, tech companies, and health advocates to explore social media's potential for spreading positive messages, as a key component of interventions to help young people coping with depression and other challenges.4

Therefore this survey also sought to collect young people's descriptions of a wide variety of social media behaviors to begin to explore the association between types of social media experiences and mental well-being among teens and young adults. We have collected detailed information about how respondents describe using social media: how often they report checking it, how often they report posting, how frequently they say they take specific actions, whether they say they get positive or negative feedback from their followers, and how it makes them feel.

- 2 Federal Interagency Forum on Child and Family Statistics. America's Children: Key National Indicators of Well-Being, 2017. Washington, DC: U.S. Government Printing Office. https://www.childstats.gov/americaschildren/health4.asp
- 3 See for example Twenge, J.M. (2017). iGen: Why today's super-connected kids are growing up less rebellious, more tolerant, less happy and completely unprepared for adulthood. New York: Atria Books.
- Rice, S.M. et al, 2014. "Online and Social Networking Interventions for the Treatment of Depression in Young People: A Systematic Review." Journal of Medical Internet Research 16(9).

Employing a widely used and well-validated scale to measure respondents' self-reported levels of depressive symptoms (the PHQ-8), we present a preliminary look at whether those who report moderate to severe depressive symptoms differ from those without symptoms in how they report using social media. It is important to note that due to the cross-sectional, self-reported nature of these survey responses, we are not able to assess the full possible relationship between social media use and depression, nor can we draw any conclusions with regard to causality. Rather, this survey is intended as a beginning – an attempt to gather a wide range of information on the many ways young people report using and responding to social media, and how their reported social media use does or does not vary based on their depressive symptoms as measured by the PHQ-8.

In the section of the report on social media and mental well-being, the questions we seek to answer include:

- Is there a correlation between reported frequency of social media use and reported depressive symptoms among teens and young adults?
- Do TYAs with and without current symptoms of depression report using social media in different ways, such as actively vs. passively?
- Do they say they have different experiences in terms of getting positive or negative feedback from others?
- Do teens and young adults with depressive symptoms report feeling better, or worse more connected, or more alone when using social media?
- And how do young people say they use social media when they
 notice they are feeling anxious, stressed, or depressed? Are there
 patterns in how they describe using social media at these times?

We used the PHQ-8, an eight-item validated scale widely used in academic and medical literature as a measure of depressive symptoms. See for example Kroenke, K., Strine, T.W., Spitzer, R.L., Williams, J. B. W., Berry, J.T., & Mokdad, A.H. (2009). "The PHQ-8 as a measure of current depression in the general population." Journal of Affective Disorders, 114, 163-173. doi:10.1016/j.jad.2008.06.026. (The Methodology section of this report includes a more complete discussion of the measures of depressive symptoms used in this survey.)

We are fortunate that the advent of probability-based online survey providers has made it possible for us to gather extensive amounts of qualitative input through open-ended questions, along with the nationally representative quantitative data. In this survey, we used open-ended questions to ask teens and young adults to give us examples of personal experiences, such as times they have gone online for health information, or how they use social media when they are feeling down. These qualitative responses have been invaluable in adding depth and insight to our findings. While all statistics cited in the report are from the quantitative results, the qualitative responses have been evaluated for themes and have helped inform the text of the report. In addition, numerous verbatim responses from teens and young adults are provided throughout the report. We are grateful for the number of respondents who took the time to answer these questions — as many as 600 individual responses per topic.

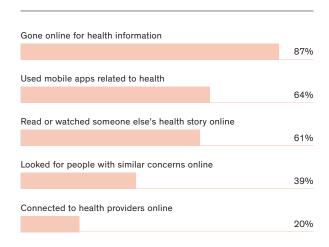
It is almost as if they were waiting for someone to ask; now it is our turn to listen.

The survey was conducted among 14- to 22-year-olds. Throughout the report, we refer to this population as "teens and young adults," or TYAs. We also occasionally use the terms "youth" or "young people" as shorthand. And we discuss two developmentally distinct sub-populations as part of this broader group: "teens" (14 to 17 years old) and "young adults" (18 to 22 years old).

Teens (14- to 17-year-olds) and young adults (18- to 22-year-olds) describe making extensive use of a wide range of digital resources to access health information, tools, peer support, and providers online.

- Nearly nine out of ten (87%) teens and young adults say they have gone online for health information: the top five topics searched are fitness (63%), nutrition (52%), stress (44%), anxiety (42%), and depression (39%).
- Nearly two-thirds (64%) say they have used mobile apps related to health, including for fitness, sleep, meditation, and medication reminders.
- The majority (61%) say they have read, listened to, or watched other people share about their health experiences online, whether in podcasts, TED talks, or YouTube videos.
- About four in ten (39%) say they have gone online to try to find people with health conditions similar to their own, using methods such as participating in online forums or closed social media groups on specific issues, doing hashtag searches on social media, or following people with similar health conditions.
- One in five (20%) young people report having connected with health providers online, through tools like online messaging, apps, texting, and video chat.

Figure 1. Reported use of online health resources Percent of 14- to 22-year-olds who say they have:



Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22.

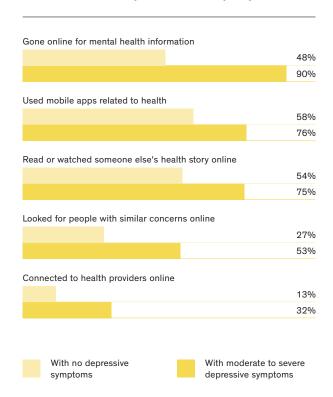
Young people who report symptoms of depression are using digital tools to learn about and help address their problems.

Using the Patient Health Questionnaire depression scale (PHQ-8), survey respondents were identified as currently having either no, mild, or moderate to severe depressive symptoms. Based on these PHQ-8 scores, teens and young adults in this sample with moderate to severe depressive symptoms say they use digital health resources at higher rates than do others their age without depressive symptoms. Among teens and young adults with moderate to severe depressive symptoms:

- Nine out of ten (90%) say they have gone online for information on mental health issues (compared to 48% of those without depressive symptoms).
- Three out of four (76%) say they have used health-related mobile apps (compared to 58% of those with no symptoms). Nearly four in ten (38%) say they have used apps related to mental well-being, such as meditation, stress reduction, and depression.
- Three out of four (75%) say they have watched, listened to, or read people sharing about their health experiences online, through venues such as podcasts, blogs, TED talks, or YouTube videos (compared to 54% of those with no depressive symptoms).
- Fully half (53%) have tried to find people online with similar health concerns, through methods such as social media, blogs, and online forums (compared to 27% of those who report no depressive symptoms).
- And nearly one in three (32%) report having used online tools to connect with a health provider (such as texting, video chat, or an app), compared to 13% of those without depressive symptoms.

Figure 2. Reported use of online health resources, by depressive symptoms

Percent of 14- to 22-year-olds who say they have:



6 For simplicity, we occasionally refer to respondents with no depressive symptoms as "non-depressed."

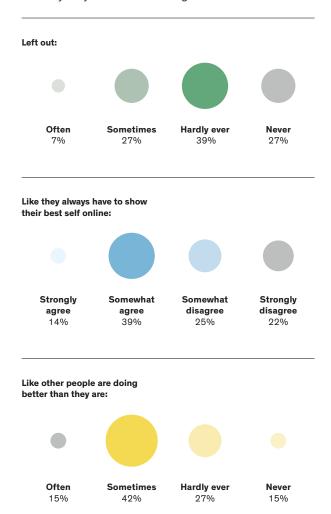
Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22. Note: All differences between groups depicted in this chart are statistically significant at p<.05.

Social media is an integral part of young peoples' lives, with many teens and young adults reporting a mix of both positive and negative aspects to its use.

- More than nine in ten (93%) teens and young adults report using social media sites such as Snapchat, Instagram,
 Facebook, and Twitter: 81% say they use it on a daily basis, including 17% who say they use it "almost constantly" and 54% who do so multiple times a day. Just 7% say they don't use social media at all.
- Most teen and young adult social media users (73%) say they feel comfortable with the amount of time and energy they devote to it, but one in four (24%) say they spend too much time on social media, and half (51%) say they have taken a break from it at some point.
- Teens and young adults are far more likely to report frequently receiving positive than negative feedback from others on social media: 32% say they "often" get positive comments from others compared to just 3% who say they "often" get negative comments.
- Nearly two-thirds (65%) say they "hardly ever" or "never" feel left out when using social media, compared to about a third (34%) who say they often (7%) or sometimes (27%) do.
- On the other hand, more than half report experiencing some degree of social comparison pressure, with 57% saying they feel like other people are doing better than they are (15% "often" and 42% "sometimes" feel that way when using social media). And about half (53%) say they feel like they always have to show the best version of themselves on social media (14% strongly agree, and 39% somewhat agree with that statement).

Figure 3. Response to social media

Among 14- to 22-year-old social media users, percent who say they feel... when using social media



Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,242 social media users ages 14-22.

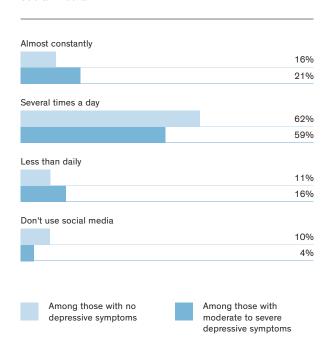
This survey did not find a statistically significant bivariate relationship between how frequently young people use social media and their current symptoms of depression.

- Among the population of 14- to 22-year-olds as a whole, we looked at whether respondents with moderate to severe depressive symptoms, as indicated by PHQ-8 scores, reported using social media more frequently than those with no depressive symptoms.
- Twenty-one percent of those with moderate to severe depres sive symptoms described themselves as "constant" users of social media, as did 16% of those with no symptoms (not a statistically significant difference). Similarly, 59% of those with moderate to severe symptoms and 62% of those with no symptoms said they use social media "several times as day," also not a significant difference.

Again, because this survey only captures respondents' own reports about their social media use, we do not know how well these findings correlate with objectively-measured behavior. And because this survey asked "how often" but did not ask respondents to estimate the total amount of time they spend on social media per day, it is possible that there are differences in the length of time devoted to social media use that don't show up in our measures of frequency of use. And finally, the data presented here are for the population of 14- to 22-year-olds as whole; it is possible that more detailed future analyses may uncover relationships in specific subsets of this population.

Figure 4. Reported frequency of social media use, by PHQ-8 depressive symptoms

Percent of 14- to 22-year-olds who say they use social media...



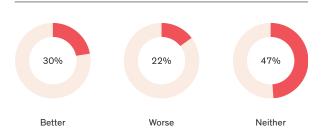
Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22. Note: Differences depicted in this chart are not statistically significant at p<.05.

Young people with moderate to severe depressive symptoms report having heightened responses to social media – both positive and negative — compared to those without symptoms of depression.

- Respondents with moderate to severe depressive symptoms, as indicated by PHQ-8 scores, are nearly twice as likely as respondents without depressive symptoms to say that when they are feeling depressed, stressed, or anxious, social media helps connect them to useful support and advice (25% v. 13%), but they are also more likely than others their age to say it makes them feel worse during those periods (22% v. 7%).
- On balance, those with moderate to severe depressive symptoms are slightly more likely to say that using social media during these periods makes them feel better (30%) than they are to say it makes them feel worse (22%). (A plurality (47%) say that when they are feeling depressed, stressed, or anxious, using social media doesn't make them feel better or worse.)

Figure 5. Response to social media when feeling depressed, stressed, or anxious

Among 14- to 22-year-old social media users with moderate to severe depressive symptoms on the PHQ-8, percent who say using social media when they are feeling depressed, stressed, or anxious makes them feel:



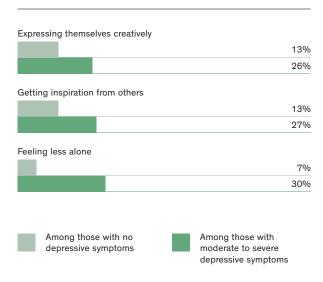
Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,242 social media users ages 14-22.

For young people with moderate to severe depressive symptoms, social media may be more important than for youth without depressive symptoms when it comes to feeling less alone, finding inspiration, and providing a venue for creative self-expression.

- Social media users with moderate to severe depressive symptoms, as indicated by PHQ-8 scores, are more likely than those with no symptoms to say that social media is "very" important to them for:
 - → Feeling less alone (30% for those with moderate to severe depressive symptoms, compared to 7% for those with no symptoms);
 - → Getting inspiration from others (27%, compared to 13%); and
 - → Expressing themselves creatively (26%, compared to 13%).
- In addition, young people with moderate to severe depressive symptoms who use social media are more likely to say they prefer communicating with people through social media than in person (42% agree with that statement, compared to 25% of those with no symptoms), including 17% who "strongly agree" (compared to 4% of those with no symptoms).

Figure 6. Importance of social media, by PHQ-8 depressive symptoms

Percent of 14- to 22-year-old social media users who say social media is "very" important to them for:



Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,242 social media users ages 14-22. Note: All differences depicted in this chart are statistically significant at p<.05.

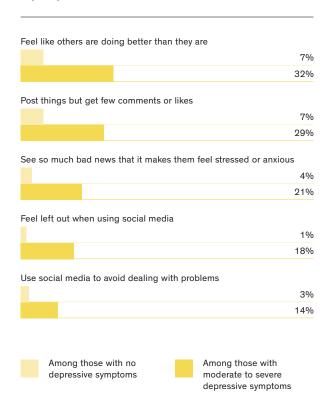
However, teens and young adults with moderate to severe depressive symptoms are more likely than other young people to say they have certain negative experiences on social media.

They are more likely to say they:

- Get negative comments from others, at least sometimes (38% v. 17% of those with no depressive symptoms);
- Post things but get few comments or likes (29% v. 7% often);
- Feel like others are doing better than they are (32% v. 7% often);
- Feel left out when using social media (18% v. 1% often);
- Use social media to avoid dealing with problems (14% v. 3% often);
- See so much bad news in social media that it makes them stressed or anxious (21% v. 4% strongly agree);
- Have been "trolled" on social media (having somebody intentionally create conflict with them; 31% v. 14% ever);
- Have "stalked" someone on social media (checking people out online without them knowing about it;⁷ 31% v. 16% ever); and
- Have deleted a social media account after a personal conflict (30% v. 10% ever).

Figure 7. Negative experiences and responses on social media, by depressive symptoms

Percent of 14- to 22-year-old social media users who say they "often"... on social media



7See Methodology section for more discussion about the use of this term.

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,242 social media users ages 14-22. Note: All differences depicted in this chart are statistically significant at p<.05

This survey did not find a statistically significant association between depressive symptoms and whether respondents reported engaging in more "active" or "passive" behaviors on social media.

- Some previous research has suggested that "passive" social media use (e.g., scrolling through people's feeds without posting or commenting) may be correlated with increased depression while "active" use (liking, commenting, and posting) may be correlated with lower levels of depression. Therefore this survey explored whether young people with moderate to severe depressive symptoms report engaging in these and other common social-media actions at a different frequency than their peers.
- In this sample, respondents with moderate to severe depressive symptoms, as indicated by PHQ-8 scores, were no less likely than those with no depressive symptoms to say they post content on social media on a daily basis (29% say they do so daily, compared to 32% of those with no depression), comment on other people's posts (16% vs. 18% "often" do so), send private messages to people (29% vs. 28% do so "often"), create and share original content (20% vs. 18% "often"), or share content created by others (18% vs. 13% of non-depressed youth say they "often" do so).
- The only surveyed action that young people with moderate to severe depressive symptoms report doing with a different frequency than their non-depressed peers is "like" other people's posts, which they report doing more frequently than others do: 62% of young people with moderate to severe depressive symptoms say they often "like" others' posts, compared to 47% of non-depressed youth.
- There is no difference in how often young people with moderate to severe depressive symptoms vs. those with no symptoms report passively browsing other people's feeds without liking or commenting on them (32% vs. 24% say they "often" do that).
- The data presented here are for the population of 14- to 22-year-olds as whole; it is possible that more detailed future analyses may uncover relationships in specific subsets of this population, or may detect subtler patterns of use not evident in these direct comparisons.

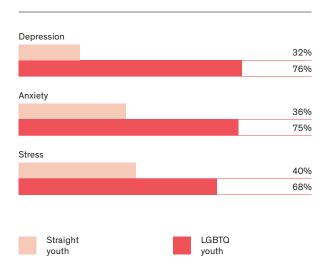
8
Frison, E. and Eggermont, S. (2015). "Toward an integrated and differential approach to the relationships between loneliness, different types of Facebook use, and adolescents' depressed mood." Communication Research:0093650215617506; Frison, E. and Eggermont, S. (2016). "Exploring the relationships between different types of Facebook use, perceived online social support, and adolescents' depressed mood." Social Science Computer Review 34 (2):153-171.

Females and LGBTQ youth are more likely than others their age to report seeking online resources related to mental well-being.

- Teenage girls and young women are more likely than males their age to report going online for information about anxiety (55% vs. 29% of males) or depression (49% vs. 27% of males).
- Young people who identify as gay, lesbian, or bisexual are by far the most likely to report looking online for information about depression, anxiety, or stress.
- More than three out of four LGBTQ youth (76%) say they have looked for online information about depression, compared to 32% of straight youth.
- 75% have looked for information about anxiety, compared to 36% of their straight peers.
- 68% have looked for information on stress, compared to 40% of straight youth.

Figure 8. Online health information searches, by sexual orientation

Percent of 14- to 22-year-olds who have gone online for information on:



Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22. Note: All differences depicted in this chart are statistically significant at p<.05.

Many young people describe actively curating their social media feeds and self-regulating their social media use in order to maximize positive and minimize negative effects.

Based on more than 400 open-ended responses provided by teens and young adults describing how they use social media when they are feeling depressed, stressed, or anxious, it appears that:

 Every individual responds differently to social media when they are feeling poorly. Many survey participants exhibit a high degree of self-awareness about the impact social media has on them during those times.

As noted above, based on the quantitative survey findings, 30% of young people with moderate to severe depressive symptoms say using social media when they feel depressed, stressed or anxious usually makes them feel better, and 22% say it usually makes them feel worse. Examples of the different ways young people respond to social media include:

"It just helps me feel outside myself for a bit and find interesting topics I'd like to ponder on. When you're depressed, it's easy to get caught in a loop but through actively reading every day through social media I can always be preoccupied with information."

"Social media makes me feel worse when I'm scrolling through feeds and seeing news headlines and posts about how terrible something is."

"Social media makes me laugh and keeps me distracted so that I have time to breathe and collect myself."

"It's much easier for me to reach out for help on social media than in person. There's less pressure and I can leave it there and live my life outside of it without thinking about it too much."

Key Finding 10 Continued

- Many young people seem to curate their social media feeds to make sure they are being exposed to helpful and positive content. Teens and young adults who say social media usually makes them feel better report being exposed to funny or inspirational content.
- "I follow a lot of positive pages on social media, so I feel better when I see a funny video or a cute video."
- "If I'm feeling depressed, getting on Twitter and seeing funny tweets or watching funny videos on YouTube can really brighten my mood."
- "It makes me feel better because I can read encouragement and find inspiration to keep myself motivated when I am feeling anxious."
 - Others describe being able to self-regulate their social media use during times they say they are feeling depressed, stressed, or anxious. Many of those young people who say social media makes them feel worse also say they stay off social media during those times.
- "Usually friends post happy things getting together with others, accomplishments, bragging. I don't always want to see it when I'm feeling down about myself so I stay off social media."
- "Whenever I'm having an anxiety attack I have to put down my phone and calm down."
- "I stop after posting some sad negative stuff and find an actual friend to meet with in person."
- "When I feel upset I just stay off social media all together."

Key Finding 10 Continued

 But some young people say they continue using social media when they are feeling down, even though they notice it makes them feel worse.

"Sometimes I am aware of how bad it makes me feel but I keep using it just because I want to continue my self-loathing."

"Social media...makes things worse simply because I have told myself time and time again that I wouldn't spend so much time mindlessly scrolling through other people's lives."

"I feel like I am not good enough compared to other people. I often look at other people['s] pages and compare myself to them."

Methodology

This survey was conducted between February 12 and March 19, 2018, with 1,337 young people age 14 to 22 representing the 50 states and the District of Columbia. The survey was conducted by NORC at the University of Chicago with funding from Hopelab and the Well Being Trust. Data were collected using AmeriSpeak®, NORC's probability-based panel designed to be representative of the U.S. household population.

Interviews were offered in English or Spanish, and were conducted either online or by telephone, depending on respondent preference. A total of 41 respondents took the survey in Spanish, and 24 chose to complete the survey by phone.

Sample Recruitment

During the initial recruitment phase of the AmeriSpeak® panel, randomly selected U.S. households were sampled with a known, non-zero probability of selection from the NORC National Sample Frame and then contacted by U.S. mail, email, telephone, and field interviewers (face-to-face). The panel provides sample coverage of approximately 97% of the U.S. household population. Those excluded from the sample include people with P.O. Box only addresses, some addresses not listed in the USPS Delivery Sequence File, and some newly constructed dwellings.

For the current survey, adult panel members age 18 to 22 were randomly drawn from AmeriSpeak. To recruit teen respondents, adult panel members living in households with minors were randomly drawn from AmeriSpeak, and permission was sought from a parent or guardian to survey their teenager. If a given panelist had multiple teens at home, one teen was randomly selected to participate.

Oversamples of African American and Latino youth were conducted sufficient to generate a total unweighted sample size of more than 300 African Americans and more than 350 Hispanics. For analyses among the general population, African American and Latino respondents were weighted down to their representative proportion, according to the most recent Census.

Panelists were offered modest incentives to participate, in the form of a cash equivalent ranging in value from \$2-10 (adults were offered higher incentives than teens and those from hard-to-reach groups were offered higher incentives than others).

Response Rate and Margin of Error

The American Association of Public Opinion Research (AAPOR) defines several component rates used to calculate final response rates. Using those definitions, the final stage completion rate for this survey is 37.3 percent, the weighted household panel AAPOR III response rate is 33.7 percent, and the weighted household panel retention rate is 88.1 percent, for a cumulative response rate of 5.9 percent. Singledigit response rates are more typical now than in the past, due to the methodological challenges associated with, for example, the decline of landline telephones, a traditional way to contact U.S. households. Longitudinal assessments of declining response rates have shown that the data collected are reliable since the people answering the questions still reflect the total population. In other words, Americans across every demographic group are not responding to survey invitations. However, there is also the possibility that people experiencing emotional problems, such as depressive symptoms, are less likely to respond to a survey. The overall margin of sampling error for this survey is +/- 5.0 percentage points at the 95 percent confidence level, including the design effect. The margin of sampling error may be higher for subgroups.

Weighting

Once the sample was selected and fielded, and all the study data were collected and made final, a post-stratification process was used to adjust for any survey nonresponse as well as any non-coverage or under- and over-sampling resulting from the study-specific sample design. Post-stratification variables included age, gender, census division, race/ethnicity, and education. Weighting variables were obtained from the 2017 Current Population Survey. The weighted data reflect the U.S. population of young people age 14 to 22.

⁹ Deane, C. et al. "Flashpoints in Polling" (Pew Research Center, 2016). See: http:// www.pewresearch.org/2016/08/01/ flashpoints-in-polling/

Statistical Significance

Where relevant, differences among demographic and depressive symptom groups have been tested for statistical significance. Unless otherwise noted, these findings are described in the text in a comparative manner (e.g., "more than," "less than") only if the differences are statistically significant at the level of p < 0.05. In tables where statistical significance has been tested, superscripts (using letters such as a, b, or c) are used to indicate whether results differ at a statistically significant level (p < 0.05) within a set of columns or rows (e.g., by age groups or by depressive symptoms). Means that share a common superscript, and means that have no superscript at all, are not significantly different from each other.

For example, in Row 1 below, none of the items differs in a statistically reliable way. In Row 2, each item differs from the other significantly. In Row 3, the items in the first and third columns differ from the item in the second column, but not from each other. And in Row 4, items in Columns 1 and 3 differ from each other, but not from Column 2.

Analyses

Data presented in this report represent an initial set of descriptive findings on a subset of survey variables, including information for the sample population as a whole and the results of bivariate analyses by demographics (age, gender, race/ethnicity, and sexual orientation) and by other variables of interest such as self-reported frequency of social media use or level of depressive symptoms. This survey also collected measures of anxiety, loneliness, and sleep, and future reports may include analyses using these measures. Because the economic circumstances of respondents in the different age groups included in this survey are not directly comparable to one another (for example, living with parents while attending high school, or working a first job out of college), data were not analyzed by household income or socio-economic status. It should be noted that this report does not include multivariate regression analyses, which may be conducted in the future to further explore hypotheses of interest. Finally, it is worth repeating that given the cross-sectional, self-report nature of the survey, it is not possible to draw any conclusions about how survey responses track to objectively-measured behavior or about causality, and no assertions of causality are made.

Examples of statistical significance

	Column 1	Column 2	Column 3
Row 1	70%	75%	65%
Row 2	20%ª	35%⁵	50%°
Row 3	43%ª	60% ^b	37%ª
Row 4	13%ª	17%	23%⁵

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22.

Age Groups

The survey was conducted among 14- to 22-year-olds. Throughout the report, we refer to this population as "teens and young adults," or TYA. We occasionally use the terms "youth" or "young people" as shorthand to refer to this age group. We also discuss two developmentally distinct sub-populations as part of this broader group: "teens" (13 to 17 years old) and "young adults" (18 to 22 years old).

Definitions

In the questionnaire for this survey, we attempted to use the natural language of young people wherever possible. Certain social media practices have names that are common among young people, but may have different connotations in different contexts. In this report, "stalking" someone on social media means extensively checking someone out on social media without them knowing about it. The term "trolling" is used to mean intentionally creating conflict with someone online. The phrase "going down a rabbit hole" on the internet refers to becoming engrossed in a complex labyrinth of content from which it is hard to disengage. ¹⁰

10

The Urban Dictionary defines it as follows: "To go down a never ending tunnel with many twists and turns on the internet, never truly arriving at a final destination, yet just finding more tunnels. Clicking one link, then finding another on that page, then clicking another link on that page, which gives you the idea to search for something, and the process repeats." https://www.urbandictionary.com/define. php?term=Rabbit%20Hole

Open-ended Responses

The survey included five open-ended questions in which we invited respondents to describe, in their own words, their experiences and how they felt about them. These open-ended questions yielded a substantial amount of qualitative data and many valuable insights. In total, we received more than 2,200 personal responses to these questions, ranging from approximately 400 to 600 responses per open-ended question. The responses were read and hand-coded to look for patterns and themes. All statistical findings presented in the report are from the full quantitative sample, but insights gained from the review of open-ended responses are included in the text, and are always specified as emerging from those qualitative responses. Throughout the report, a selection of verbatim quotes from those open-ended questions are included. These quotes have been lightly edited to correct misspellings, punctuation, capitalization, and typos.

Scale for Assessing Depressive Symptoms

The survey employed a previously validated scale for assessing depressive symptoms - The Patient Health Questionnaire Depression Scale (PHQ-8). The PHQ-9 (with an additional question about suicide that was omitted from this survey) has been validated for use among adolescents, and the PHQ-8 has been validated among the general population as a measure of current depression. In accordance with the scale protocol, responses were coded numerically and summed, so that each respondent was given a total score between 0 and 24 points. (Three respondents who were missing data on scale items were excluded from these analyses.) The scale identifies cut-points of levels of depressive symptoms: none (0-4), mild (5-9), moderate (10-14), moderately severe (15-19), and severe (20-24). The scale protocol indicates that a score of 10 or greater is considered a "yellow flag" (i.e., drawing attention to a possible clinically significant condition

11

Richardson, L. P., McCauley, E., Grossman, D.C., McCarty, C., Richards, J., Russo, J. E., Rockhill, C., & Katon, W. (2010). "Evaluation of the Patient Health Questionnaire (PHQ-9) for detecting major depression among adolescents." Pediatrics, 126(6):1117-1123. doi:10.1542/peds.2010-0852; Allgaier, A., Pietsch, K., Fruhe, B., Sigl-Glockner, J., & Schulte-Korne, G. (2012). "Screening for depression in adolescents: Validity of the patient health questionnaire in pediatric care." Depression and Anxiety, 29, 906-913. DOI 10.1002/da.21971; Kroenke, op cit.

warranting further attention). ¹² Other research has shown that cutpoints ranging from eight to 11 can be used for defining current depression, with 10 being the most commonly validated in adults. ¹³ Therefore, for purposes of data analysis, in this report respondents were classified into three groups by level of depressive symptoms: none (0-4), mild (5-9), and moderate to severe (10+). However, it should be recognized that there is an important difference between a score of 10+ on the PHQ-8 and a clinical diagnosis of depression, which is a diagnostic assessment made by a trained, licensed medical or mental health practitioner.

This survey is not intended as a comprehensive assessment or analysis of the extent and severity of depressive symptoms among teens and young adults. The primary purpose of including such measures in the survey is to explore how those young people who report current depressive symptoms describe a wide range of digital health and social media behaviors and experiences, and whether their descriptions of use are different than among those without current depressive symptoms. It is also important to note that due to the cross-sectional, self-report nature of this survey, it cannot assess the full relationship between depression and behaviors such as social media use, nor can it speak to how such experiences develop over time. The findings presented are descriptive and correlational only; they cannot be interpreted as implying causality.

About NORC at the University of Chicago

NORC at the University of Chicago is an independent research institution that delivers reliable data and rigorous analysis to guide critical programmatic, business, and policy decisions. Since 1941, NORC has conducted groundbreaking studies, created and applied innovative methods and tools, and advanced principles of scientific integrity and collaboration. Today, government, corporate, and nonprofit clients around the world partner with NORC to transform increasingly complex information into useful knowledge. NORC conducts research in five main areas: Economics, Markets, and the Workforce; Education, Training, and Learning; Global Development; Health and Well-Being; and Society, Media, and Public Affairs.

12

Instructions for Patient Health Questionnaire (PHQ) and GAD-7 Measures. See: https://www.ons.org/sites/default/files/ PHQandGAD7_InstructionManual.pdf

13

Kroenke et al, op. cit.

→ Digital Health Practices Among Teens and Young Adults

Online Health Information Searches Mobile Health Apps Connecting to Health Providers Online Peer to Peer Health Online

→ Demographic Differences in Digital Health Use

Differences by Age
Differences by Gender
Differences by Race or Ethnicity
Differences by Sexual Orientation

→ In Their Own Words

Young People, Online Health Information, and Peer Health Resources

→ In Their Own Words

Teens and Young Adults Share About Their Favorite Mobile Health Apps

ightarrow Digital Health Use and Depression

Online Health Information Searches Among Young People With Depressive Symptoms Mobile Health App Use Among Young People With Depressive Symptoms Connecting to Health Providers Online by Young People With Depressive Symptoms Peer to Peer Health Online Among Young People With Depressive Symptoms

→ In Their Own Words

Young People, Depression, and Online Health Resources

Digital Health Practices Among Teens and Young Adults

The analysis presented here focuses on teens and young adults (TYAs) as a whole and then moves on to a presentation of descriptive data by age, gender, race/ethnicity, sexual orientation, and symptoms of depression.

Overall, TYAs report that they are deeply engaged in the pursuit of health information and they say they are finding helpful resources. This age group fans out across the digital health landscape, searching for information, downloading apps, and learning from people who share the same health concerns. Previous research has shown that social media create meeting grounds for teens ¹⁴ and young adults ¹⁵ and these digital tools connect people not only to information, but also to each other. ¹⁶ This study finds that social media has indeed created a multitude of opportunities for young people to connect, share, and create the health resources they need.

14

"The Common Sense Census: Media Use by Tweens and Teens" (Common Sense Media; November 3, 2015). See: https:// www.commonsensemedia.org/research/ the-common-sense-census-media-useby-tweens-and-teens

15

Social Media Fact Sheet (Pew Research Center; January 2018). See: http://www.pewinternet.org/fact-sheet/social-media/

16

Fox, S. and Duggan, M. "Health Online 2013: Peer-to-Peer Health Care" (Pew Research Center; January 15, 2013). See: http://www.pewinternet.org/2013/01/15/peer-to-peer-health-care/

Digital Health Practices Among Teens and Young Adults

Online Health Information Searches

The majority of teens and young adults -87% - say they have gone online for health information. The most commonly researched topics are fitness (63%) and nutrition (52%). A large proportion of young people say they have searched online for information about mental well-being (59%), including stress (44%), anxiety (42%), and depression (39%). Other commonly researched topics include birth control (30%), pregnancy (28%), and sexually transmitted diseases (STDs) (26%).

Six percent of all respondents shared, in their own words, a topic they had researched online related to mental health that was different from the list provided by the survey. Examples include searches related to bipolar disorder, addiction, and gender dysphoria. An additional 6% of respondents shared the physical health concerns they had researched that were different from the choices listed in the table above. Those included topics such as asthma, scoliosis, chronic pain, lupus, and migraine.

The mean number of health topics researched online is five: 12% say they have searched for zero or just one topic, 70% of young people are in the middle (reporting 2 to 8 topics), and 18% might be considered heavily engaged in online health research (reporting 9+ topics). Those who have sought information on nine or more topics are more likely to be female and older.

When asked to indicate the reasons they have searched for health information online, three-quarters of online health seekers in this survey say they wanted to get information about a health issue they themselves were dealing with. About half of online health seekers (53%) say they have searched for information on a health issue affecting someone they know. Fifty-five percent say they have looked for information for a school or other outside project. A small group (5%) cited other reasons, with "curiosity" being the most popular written response. (Respondents could provide multiple reasons for their health searches.)

Almost all (94%) of those who have sought health information online say they find it at least "somewhat" helpful – a finding that points to the possibility of return customers and new avenues for public health outreach online. Among online health seekers, 29% say the information they found most recently was "very" helpful, and 65% say it was "somewhat" helpful.

Table 1: Online health seekers

Among 14-22 year-olds, percent who have gone online for information about:

TOTAL – any health topic	87%
Any other physical health issue	6%
Any other mental health issue	6%
Heart disease	14%
Diabetes	16%
Eating disorders (such as anorexia or bulimia)	18%
Smoking	20%
Cancer	24%
Drug or alcohol abuse	24%
Sexually transmitted diseases	26%
Sleep disorders	27%
Pregnancy	28%
Birth control	30%
Depression	39%
Anxiety	42%
Stress	44%
Diet and nutrition	52%
Fitness and exercise	63%

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22.

Digital Health Practices Among Teens and Young Adults

Mobile Health Apps

Nearly two-thirds of teens and young adults say they have used mobile apps related to health. Previous research has shown that health app usage is associated with being younger¹⁷ and this study underscores that observation. A total of 64% of teens and young adults say they have used a health-related mobile app, with fitness apps being the most commonly reported (45%). One in four (26%) young people say they have used nutrition-related apps, while one in five report using apps related to sleep (20%) or menstrual cycles (20%). About one in ten say they have used apps related to meditation or mindfulness (11%) and stress reduction (9%). Only 4% say they have used apps related to quitting smoking.

On average, teens and young adults report using mobile apps related to 1.6 health topics. A third (34%) say they have never used a mobile health app; about half (52%) say they have used apps on 1-3 different health topics; and 14% report having tried apps on four or more health topics.

There is not yet a strong evidence base for the effectiveness of health apps. ¹⁸ While this survey is not able to assess effectiveness, it did ask respondents how helpful they perceived health-related apps they've tried. We find that, of those who have tried health-related apps, a total of 76% find them at least "somewhat" helpful: 27% say they were "very" helpful and 49% say "somewhat." While 64% of young people say they have "ever" used health apps, 25% say they "currently" do. It appears that many young people are using health-related apps for just a short time – to reach a goal, for example.

Table 2: Health app users

Among 14-22 year-olds, percent who have ever used mobile health apps related to:

TOTAL – any health app	64%
Any other health issue	1%
Alcohol or drug abuse	2%
Quitting smoking	4%
Depression	5%
Mood tracker	6%
Birth control	7%
Medication reminder	7%
Stress reductions	9%
Meditation/mindfulness	11%
Period/menstruation	20%
Sleep	20%
Nutrition	26%
Fitness	45%

17

Carroll, J.K. et al. "Who Uses Mobile Phone Health Apps and Does Use Matter? A Secondary Data Analytics Approach" (Journal of Medical Internet Research; April 19, 2017). See: https://www.ncbi. nlm.nih.gov/pmc/articles/PMC5415654/

18

Byambasuren, O.; Sanders, S.; Beller, E.; Glasziou, P. "Prescribable mHealth apps identified from an overview of systematic reviews" (npj Digital Medicine, volume 1, Article number: 12 (2018); May 9, 2018). See: https://www.nature.com/articles/s41746-018-0021-9

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22.

Digital Health Practices Among Teens and Young Adults

Connecting to Health Providers Online

One in five young people report having connected with health providers online. Twenty percent of 14- to 22-year-old respondents say they have connected with a health provider online: 10% through online messaging, 8% through texting, 5% through an app, and 4% through video chat.

Peer-to-peer Health Online

Teens and young adults turn to each other for advice when making all kinds of decisions - including those related to health. Previous studies have shown that about two in ten U.S. adults have gone online to find people who might have health concerns similar to theirs. ¹⁹ This study shows that youth lead the way in the social revolution that is underway in health.

About four in ten (39%) young people say they have gone online to try to find people with health conditions similar to their own. Most of those who tried to find such "health peers" online reported that they did succeed in finding them (84%). This means that, across all survey respondents, a total of 33% of young people have successfully found health peers online. Almost all (91%) of those who found health peers online say the experience was at least "somewhat" helpful: 20% say it was "very" helpful and 71% say "somewhat."

The majority (61%) of teens and young adults report reading or watching other people share about their health experiences online. This includes teens and young adults who have watched TED talks, seen YouTube videos, or read blogs or social media accounts of a variety of personal health stories. Fifteen percent of young people say they have shared their own personal health experience online in some fashion.

19

Fox, S. "Peer to peer Health Care" (Pew Internet Project; February 28, 2011). See: http://www.pewinternet.org/2011/02/28/ peer-to-peer-health-care-2/

Digital Health Practices Among Teens and Young Adults

Teens and young adults report using a variety of methods to connect with peer-to-peer health resources online. As mentioned above, a total of 39% say they have gone online to try to find people with health conditions similar to their own. Among the methods they have used to do that are: going to online forums on specific health topics (e.g., a chat room for people with diabetes), which more than one in four (28%) young people say they have done; through social media (19% report having done this); through blogs (15%); and commenting on other people's public posts (14%). (The total adds to more than 39% because some TYAs have used more than one way to try to find health peers online).

The 19% of teens and young adults who report using social media specifically to try to connect with health peers say they have done so in a variety of ways, including: following somebody with similar health concerns (13% of all TYAs), conducting hashtag searches on social media (9% of all), participating in private social media groups such as closed Facebook groups (9% of all), or posting their own queries on social media (8% of all). (Again, the total adds to more than 19% because some TYAs use more than one method to find health peers through social media).

Some young people prefer offline health resources. Of the 61% of those who say they haven't sought out people with similar health concerns online, most say it's because they simply haven't had any serious health issues (55%; respondents were allowed to select multiple reasons why they had not done so). But many also say they would rather talk to people in person (36%) or that they prefer to rely on professional health providers (33%). One in four (25%) say they don't trust online advice from people they don't know. Fewer than one in ten (9%) say they don't know how to find people online with similar health conditions.

Table 3: Connecting to health peers online

Among 14- to 22-year-olds, percent who say they have used each method to try to find health peers online:

TOTAL: Have gone online to find people with similar health concerns ⁺⁺	39%
Commenting on public posts (e.g. YouTube)	14%
Through blogs	15%
Posting queries on social media	8%
Private/closed social media groups	9%
Hashtag searches on social media	9%
Following someone on social media with similar health concerns	13%
Through social media ⁺	19%
Online forums on specific health topics	28%

Subitems add to more than 19% because respondents used multiple methods to find health peers through social media.

Subitems add to more than 39% because respondents used multiple methods to connect with health peers online.

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22.

⁺⁺

Demographic Differences in Digital Health Use

What follows are descriptive data on reported use of digital health resources by age group, gender, race/ethnicity, and sexual orientation in this survey sample.

Differences by Age

Young adults (18- to 22-year-olds) are more likely than teens (14- to 17-year-olds) to say they access all types of online health resources – information, peer advice, personal stories, connections to health providers, and health-related apps. There are no differences in how helpful those in different age groups find the online resources they use.

- Ninety-four percent of young adults say they have gone online for health information, compared to 79% of teens. The largest differences are in the older group's searches for information on pregnancy (a 28 percentage point difference), anxiety (26 point difference), depression (23 point difference), birth control (22 point difference), and stress (22 point difference).
- Seventy-six percent of young adults say they have tried a health-related mobile app, compared with 49% of teens.
 On average, young adults say they have tried two health apps, whereas teens have typically tried just one. A third (34%) of the older group reports currently using a mobile health app, compared to 14% of the teens.
- More than two-thirds (69%) of young adults say they have watched or read something online about other people's health experiences, compared to 52% of teens.
- Half (51%) of young adults say they have tried to find people online with health concerns similar to their own, compared to 25% of teens.
- One in five (20%) young adults report sharing their own health experiences online, whether through social media, blog posts, or videos; 8% of teens report doing so.
- Nearly three in ten (28%) young adults say they have connected to health providers online, compared to 10% of teens.

Table 4: Online health seeking, by age and gender Among 14- to 22-year-olds, percent who say they have ever:

ooked for hea	Looked for health information online				
Ages 14-17 79% ^a	Ages 18-22 94% ^b	Male 83%ª	Female 91% ^b		
Used a mobile	health app				
Ages 14-17 49%ª	Ages 18-22 76% ^b	Male 57%ª	Female 71%⁵		
	listened to some	eone			
Ages 14-17 49%ª	Ages 18-22 76% ^b	Male 57%ª	Female 71% ^b		
Tried to find pe	ople online with s to their own	similar			
Ages 14-17 25%ª	Ages 18-22 51% ^b	Male 33%ª	Female 44% ^b		
Shared their ov	vn health story o	nline			
Ages 14-17 8%ª	Ages 18-22 20% ^b	Male 15%	Female 14%		
Connected to h	ealth providers	online			

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22. Note: Superscripts are used to denote statistical significance across rows at p<.05. Items with no superscripts, and items that share a common superscript, are not significantly different.

Differences by Gender

Among our survey population of 14- to 22-year-olds, females are more likely than males to report making use of digital health tools, including going online for health information, looking for peer-to-peer health advice online, and using mobile health apps. There are no differences in how helpful females and males find the online resources they use.

- Ninety-one percent of teen and young adult females say they have gone online for health information, compared to 83% of males. The largest differences are in females' searches for information on birth control (36 percentage points) and pregnancy (35 points). There are also large differences in the likelihood of females reporting they have gone online for information about anxiety (a 26 percentage point difference) and depression (22 points).
- Seventy-one percent of females TYAs surveyed say they have tried mobile apps related to health, compared to 57% of males. Three in ten (30%) females say they currently use a health app, compared to two in ten (20%) males.
- Two-thirds (67%) of female TYAs say they have watched or read someone else's health story online, compared to 55% of males.
- Forty-four percent of females say they have tried to find people online with health concerns similar to their own, compared to 33% of males.
- There are no statistically significant differences by gender in the likelihood of young people reporting that they share their own personal health experiences online, or that they use digital tools to connect with health providers online.

Digital Health Practices

Demographic Differences in Digital Health Use

Differences by Race or Ethnicity

There are far fewer differences by race and ethnicity in our survey sample than by age and gender in terms of how young people say they use digital technology for health information and communication.

- There are no statistically significant differences among White, Black, or Latino youth in this sample in the percent that say they have ever gone online for health information, used health-related mobile apps, watched or read other people's personal health stories online, or gone online to find people with health concerns similar to their own.
- Black youth are more likely to say they have connected to a health provider online (34%, compared to 20% of Whites and 17% of Latinos).
- Black youth are also more likely to have shared their own health stories online (24%, compared to 13% of White and Latino youth).

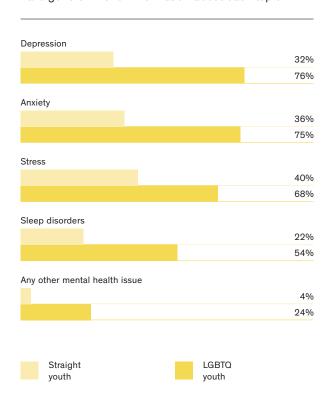
Differences by Sexual Orientation

Lesbian, gay, and bisexual youth (LGBTQ) are more likely than those who identify as heterosexual to report going online for health information, accessing other people's personal health stories online, and sharing their own health stories.

- Virtually all (98%) young people who identify as lesbian, gay, or bisexual say they have gone online to find information about health issues, compared to 86% of those who identify as straight. There are large differences between straight and LGBTQ young people in terms of the topics they say they research online, particularly when it comes to mental health. LGBTQ youth are far more likely than straight youth to report having gone online to try to find information about depression (a 44 percentage point difference), anxiety (a 39 point difference), sleep disorders (32 percentage points), and "other mental health issues" (a 20 percentage point difference).
- Eighty-one percent of LGBTQ youth say they have watched or read other people's health stories online, compared to 57% of straight youth.
- More than one in four (28%) LGBTQ young people report having shared their own health stories online, compared to 13% of their heterosexual peers.
- There are no differences between straight and LGBTQ youth in terms of their reported use of mobile health apps, trying to find people online with similar health concerns, or using online resources to connect with health providers.

Figure 9: Online health information searches, by sexual orientation

Among 14- to 22-year-olds, percent who say they have gone online for information about each topic



Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22. Note: All differences between LGBTQ and straight youth depicted in this chart are statistically significant at p<.05.

In Their Own Words

Young People, Online Health Information, and Peer-to-peer Health Resources

Below we present a small sample of the hundreds of verbatim comments shared by respondents. Most were from people who had a good experience, but a few shared cautionary tales. A majority (300+) told about looking online for advice about a physical health question, but about 200 people said they sought mental health information. Mirroring the quantitative data, most people were learning from someone else's story and were comforted by the mere fact of not being alone in their concern. Only about 50 people said they posted their own stories, questions, and experiences online. Video was a popular medium among all groups.

"I had a family member who has skin cancer and I was wondering about treatments and effects of skin cancer. I ended up finding lots of info that proved to be helpful and ease my worries."

- 14-year-old White male

"I watched videos of people talking about their family member's eating disorders, because my roommate had one and I didn't know how to support her."

- 21-year-old White female

"I asked about the electric cigarettes to quit smoking; a lot of people had something to say but I asked if the gum or those cigarettes are addicting. Because my friend can't seem to stop using them."

- 17-year-old Latino male

"My mom was making me get the hepatitis A vaccine and [another] one for HPV and I didn't know what the shots were for, and I was too scared to ask the nurse about it, especially after she started talking about gay sex & warts, so I went online to [a medical website] and tried to research it myself. It's still hard to do that when you don't what the words mean. I finally asked my mom & she sat down with me, and we got online and did the pros & cons. I felt better after cause she was explaining what I didn't understand."

- 14-year-old White female

ightarrow view more quotes

In Their Own Words

Teens and Young Adults Share About Their Favorite Mobile Health Apps

About 500 people responded to the invitation to share their favorite app and tell why it has been helpful – a level of response that speaks to the passion TYAs feel for these tools. Over 200 named a fitness or diet-related app and over one hundred people named a period-tracking app. Smaller groups cited apps that help with mental well-being, sleep, or a specific medical concern.

"My favorite healthrelated app is the sleep
tracking app on the
Apple store. It helped
me track my manic
nights where I experience
racing thoughts."

- 20 year-old female

"The app I like to use is a period tracker. It also gives facts about symptoms you feel throughout the month. It's helpful because whenever I'm feeling a certain way and not sure if its period related I always go check how many days till my cycle and it usually makes me feel better."

- 17 year-old Hispanic female

"[A meditation app] was real cool, it helped me refocus and understand awareness."

- 20 year-old Black male

"I have an app that basically gives you a bit of inspiration every morning to be you and love yourself. It helps me take time for me instead of rushing around at 6 in the morning stressing about the day."

- 14 year-old female

"My favorite health related app is [one on addiction and sobriety]. I'm bulimic and it helps me try and stop bingeing and purging."

- 22 year-old female

 \rightarrow VIEW MORE QUOTES

Digital Health Use and Depression

One of the goals of this initial report is to explore how teens and young adults (TYAs) with current depressive symptoms report using digital health tools and social media, including whether they describe different types of use than other TYAs. Accordingly, the survey employed a widely-used eight-item validated scale for assessing the severity of depressive symptoms, the Patient Health Questionnaire depression scale (PHQ-8).²⁰ Responses were coded numerically and summed, so that each respondent was given a total score between 0 and 24 points. According to the scale protocol, a total score of 0 to 4 represents no significant depressive symptoms; a score of 5 to 9 represents mild depressive symptoms; 10 to 14, moderate; 15 to 19, moderately severe; and 20 to 24, severe. For purposes of data analysis, respondents were classified into three groups by level of depressive symptoms: none (0-4), mild (5-9), and moderate to severe (10+).²¹

For clarity, we focus the bulk of our discussion below on a comparison between those with moderate to severe depressive symptoms and those with no symptoms; data for those in the middle group ("mild" symptoms) are also included in the tables. The results of these preliminary analyses indicate that teens and young adults who are coping with moderate to severe depressive symptoms are making extensive use of a wide range of digital health resources and that they are doing so at significantly higher rates than those their age without depressive symptoms.

Table 5: Depressive symptoms of teens and young adults

Proportion of 14- to 22-year-olds with each level of depressive symptoms

Level of depressive symptoms	
(PHQ-8 score)	Percent
None (0-4)	52%
Mild (5-9)	23%
Moderate to severe (10+)	25%
Moderate (10-14)	17%
Moderately severe (15-19)	5%
Severe (20-24)	3%

20 Kroenke, K., et al, op cit.

Por more details on the use of the Patient Health Questionnaire depression scale (PHQ-8) please refer to the Methodology section.

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22.

Online Health Information Searches Among Young People With Depression

As seen earlier in this report, the majority of teens and young adults – 87% – report having gone online for health information, including a large proportion that say they have searched online for information about mental well-being, including stress (44%), anxiety (42%), and depression (39%). This survey also finds that young people who are experiencing depressive symptoms are more likely than those who exhibit no symptoms to report turning to online resources for information about mental well-being. The highest reported rates of online health-seeking are among those with moderate to severe levels of depressive symptoms. All told, nine out of ten (90%) teens and young adults with moderate to severe depressive symptoms say they have gone online to look for information on mental health issues. Nearly two-thirds (64%) of TYAs with moderate to severe depressive symptoms report having turned to the internet for help with depression specifically.

The majority (88%) of those with moderate to severe depressive symptoms who reported going online for information on any health topic say the information they found during their most recent search was helpful (24% say "very" helpful, and 64% say "somewhat"). However, this is a slightly lower rate than among youth with no depressive symptoms, among whom 96% found the information very (34%) or somewhat (61%) helpful.

Table 6: Reported online health information searches, by degree of depressive symptoms

Percent of 14- to 22-year-olds who say they have gone online for information on:

	Depressive symptoms		
	None	Mild	Moderate to severe
Any health topic	78%ª	96% ^b	98% ^b
Any mental health topic	48%ª	81% ^b	90% ^b
Depression, stress, or anxiety	42%ª	71% ^b	82% ^b
Depression	22%ª	51% ^b	64% ^b

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22. Note: Superscripts are used to denote statistical significance across rows at p<.05. Items with no superscripts, and items that share a common superscript, are not significantly different.

Mobile Health App Use Among Young People With Depressive Symptoms

Three out of four (76%) TYAs with moderate to severe depressive symptoms say they have used health-related mobile apps, including 38% who say they have used apps related to mental well-being, such as stress reduction (19%), meditation/mindfulness apps (18%), or those designed specifically to address depression (14%). But even though teens and young adults with moderate to severe depressive symptoms report using mental health apps at higher rates than those without depressive symptoms (38%, compared with 10%), it is still the case that the majority of them (62%) have never used a mental health-related app.

While the majority (67%) of TYAs mobile health app users with moderate to severe depressive symptoms say that the mobile health apps they have used are very or somewhat helpful, this rate of satisfaction is significantly lower than for those with no depressive symptoms (81%).

Table 7: Reported health-related mobile app use, by degree of depressive symptoms

Among 14- to 22-year-olds, percent who:

	Depressive symptoms		
	None	Mild	Moderate to severe
Have ever used a mobile app on:			
Any health topic	58%ª	65%ª	76% ^b
Any mental health topic	10%ª	26% ^b	38% ^b
Stress	5%ª	7%ª	19% ^b
Meditation/ mindfulness	8%ª	11%ª	18% ^b
Depression	1%ª	4%ª	14% ^b
Mean number of app topics	1.28ª	1.58ª	2.40 ^b
Currently use a nobile health app	20%ª	26%	38% ^b
Say mobile health app was very or somewhat helpful	81%ª	76%	66% ^b

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22. Note: Superscripts are used to denote statistical significance across rows. Items with no superscripts, and items that share a common superscript, are not significantly different.

Connecting to Health Providers Online by Young People With Depressive Symptoms

Nearly one in three (32%) young people with moderate to severe depressive symptoms report having used online tools to connect with a health provider, such as through texting (15%), online messaging (11%), an app (9%), or video chat (8%). By comparison, only 13% of those with no depressive symptoms say they have used such tools to connect with providers.

Connecting to Online Peer to Peer Health Resources by Young People With Depressive Symptoms

Accessing other people's health experiences online. Watching, reading, or listening to other people's health stories online is common among this survey's teen and young adult respondents, and this is especially the case among those who are experiencing moderate to severe depressive symptoms. Whether it is through listening to podcasts, watching TED talks and other videos, or reading blogs, three out of four (75%) TYAs with moderate to severe depressive symptoms say they have done so (compared to 54% of those with no depression symptoms).

Connecting to peers. Fully half (53%) of teens and young adults with moderate to severe depressive symptoms say they have tried to find people online with similar health concerns – nearly twice the rate of those who are not depressed (27%). Among those living with depressive symptoms who say they haven't tried to find people with similar health concerns online, half (51%) say it's because they would rather talk to someone in person. One in five (21%) say it's because they don't know how to find such people online (respondents were allowed to provide multiple reasons why they didn't try to connect with peers online).

Table 8: Peer health advice, by degree of depressive symptoms

Percent of 14- to 22-year-olds who have:

	Depressive symptoms		
	None	Mild	Moderate to severe
Shared their own health stories online	5%ª	22% ^b	29% ^b
Accessed others' health stories online	54%ª	61%	75%⁵
Tried to find people online with similar health concerns (any method below)	27%ª	48% ^b	53% ^b
Through social media	11%ª	23% ^b	31% ^b
Through blogs	10%ª	23% ^b	21% ^b
By commenting on public posts (e.g. YouTube	7%ª	16% ^b	28% ^b
Through online health forums	21%ª	36% ^b	38%⁵

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22. Note: Superscripts are used to denote statistical significance across rows. Items with no superscripts, and items that share a common superscript, are not significantly different.

In Their Own Words

Young People, Depression, and Online Health Resources

More than 500 people chose to share an example of a time they went online to get health information about depression, stress or anxiety. They related stories about finding – and not finding – helpful information. What follows is a small sample of their responses:

"I currently use an app for depression, it helps me relax, clear my mind, decrease stress, focus and sleep."

- 22-year-old Black female

"A friend of mine was always sleeping and sad so I looked it up and I told her mom that I thought my friend was depressed."

- 17-year-old Latino male

"[I used] an app for depression and other diseases...it helped me because I could talk to people who would actually listen to me I would recommend the app to anyone going through any struggle in their life...including you, reader."

- 22-year-old Black female

"My friend was going through a rough time and I didn't know how to help him, so I went to Google to find answers on what to do. It didn't exactly help, it just told me things that I already knew."

- 14-year-old White male

"A mood tracker and virtual diary has helped me to determine when my depression and anxiety have been bad enough to consider asking my doctor about changing my medicine.

- 22-year-old White female

ightarrow VIEW MORE QUOTES

Social Media Use and Mental Well-Being

→ Social Media Use Among Teens and Young Adults

Frequency of Social Media Use
Top Social Media Sites Used
Importance of Social Media
Specific Actions Taken on Social Media
Positive and Negative Experiences and Reactions to Social Media
Use of Social Media When Feeling Depressed, Stressed, or Anxious

ightarrow Social Media Use Among Young People with and Without Depressive Symptoms

Frequency of Social Media Use, by Depressive Symptoms
Use of Specific Platforms, by Depressive Symptoms
Importance, of Social Media, by Depressive Symptoms
Specific Actions Taken on Social Media, by Depressive Symptoms
In Person vs. Online Communication, by Depressive Symptoms

Positive and Negative Experiences and Reactions to Social Media, by Depressive Symptoms Response From Others

Online Drama

Reaction to News Content and Using Social Media to Avoid Problems Self-presentation and Comparison to Others Use of Social Media When Feeling Depressed, Stressed, or Anxious

→ In Their Own Words

Teens and Young Adults on the Positive Aspects of Using Social Media When Feeling Depressed, Stressed, or Anxious

→ In Their Own Words

Teens and Young Adults on the Negative Aspects of Using Social Media When Feeling Depressed, Stressed, or Anxious

The relationship between social media use and depression among young people has been a topic of increasing discussion, in books, research studies, and the popular press. The reported increase in rates of depression and suicide among teens is a tremendous cause for concern, and researchers, psychologists, and public commentators are increasingly investigating the rise in use of mobile digital devices and social media and the implications for mental health, particularly among young people.²²

One of the goals for this survey is to contribute to the growing body of knowledge in this area through a combination of quantitative and qualitative data on how teens and young adults describe and perceive their social media use, using a large, nationally-representative, probability-based sample that may serve as a resource for those wishing to further explore elements of these important questions. Because this is a cross-sectional survey, we can report on correlations between depressive status and various types and amounts of social media use, but we cannot and do not infer causality. We wanted to highlight youth voices, so we asked young people themselves about their motives for using social media, specific actions they do or don't take on social media, their reactions to social media, and how they perceive that it does or doesn't affect their mental well-being. We recognize that cross-sectional data present only a snapshot and that self-reported observations are not always reliable, but we also believe that these young people's insights about their own experiences with social media and well-being provide an important additional input to our growing understanding of this issue.

The first section of this report was about the purposeful use of digital resources for health information and tools – young people's descriptions of pro-active and intentional use of online health information, searches for peer health connections, and use of mobile health apps. This section of the report is about how young people's reported use of social media – as a normal part of their daily lives – does or does not relate to their mental well-being. Here we explore a variety of aspects of mental well-being, including depression, feelings of being left out, social comparison issues, and feelings of stress and anxiety, among other issues.

22

For example, see Twenge, op cit.

We first present our findings among teens and young adults as a whole, and then go into more detail to explore social media use among young people with moderate to severe depressive symptoms. As mentioned earlier in the report, we used a validated measure of depression (the PHQ-8 depressive symptoms scale).

Our purpose in this part of the report is to describe young people's uses of and responses to social media, particularly as it relates to their mental well-being. We present information on direct associations between self-reported frequency of social media use and current depressive symptoms. (Because this survey was conducted at a single point in time, it cannot offer any evidence about whether social media use causes depression.) We also explore how and why young people say they use social media, including specifically as their use relates to mental well-being.

This section of the survey report covers the following topics:

- How often young people report using social media, whether they think they spend too much time on it, and whether they've ever taken a break from social media;
- Which sites they report ever using, and which sites they say they use the most;
- How important social media is to them in terms of serving different functions in their life, such as communicating with their closest friends, keeping up with their broader social circle, feeling less alone, expressing themselves creatively, or getting inspiration;
- Specific ways they report using social media, such as how often they post their own content, whether they ever "stalk" other people online (check them out extensively without them knowing about it),²³ and how often they like or comment on other people's content;

23
See Methodology section for a discussion of this term.

- The balance between their positive and negative experiences with social media, such as getting comments from others, posting content but not receiving any response from others, or being "trolled" (having someone intentionally create conflict with them online);²⁴
- How they feel they respond emotionally to social media use, including issues such as whether they often feel left out, or "less than" others; how much pressure they feel to always present the best version of themselves online; whether they use social media to avoid "real life" problems; and how they respond to negative news they encounter in social media; and
- Specifically, their sense of how using social media makes them feel when they are already feeling depressed, stressed, or anxious – whether, in general, they feel it makes them feel better or worse, connects them to helpful support or sends them "down a rabbit hole." ²⁵

24

See Methodology section for a discussion of this term.

25

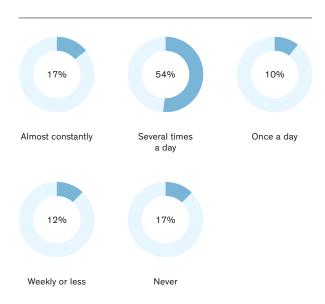
See Methodology section for a discussion of this term.

Social Media Use Among Teens and Young Adults

Frequency of Use

More than nine in ten (93%) teen and young adult respondents report using social media. Eighty-one percent say they are daily users of social media, including 17% who say they use it "almost constantly" and 54% who do so multiple times a day. Nine percent say they use it weekly, and 2% less than that; 7% say they don't use social media at all. Most social media users (73%) feel comfortable with the amount of time and energy they devote to social media, but one in four (24%) say they spend too much time and energy on it (3% say they don't devote enough time to social media). About half (51%) of all social media users in this age group say they have "taken a break" from social media at some point.

Figure 10: Reported frequency of social media use Among 14- to 22-year-olds, percent who say they use social media:



Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22.

Top Sites Used

Snapchat, Instagram, and Facebook are each used by more than 60% of young people; more than a third (37%) use Twitter; and other social media sites are far behind, such as Reddit (18%), Discord (11%), and Tumblr (11%). Four percent of respondents named another social media platform, such as YouTube, Kik, or Pinterest. Many young people say they use multiple social media platforms: 22% use two, 24% use three, 18% use four, and 17% use five or more different social media sites.

Table 9: Top social media platforms

Among 14- to 22-year-olds, percent who say they use each social media brand

	Ever use	Use most often
Snapchat	69%	30%
Instagram	68%	22%
Facebook	62%	21%
Twitter	37%	6%
Reddit	18%	5%
LinkedIn	12%	*
Discord	11%	4%
Tumblr	11%	1%
Other	4%	2%
Don't use social media	7%	7%

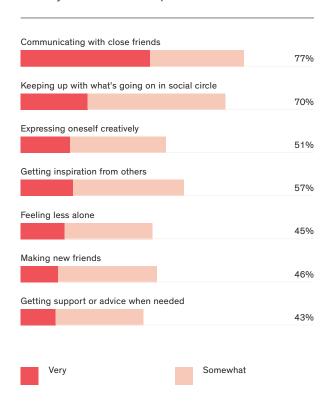
Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22. *Indicates a value of greater than zero but less than one-half of one percent.

Importance of Social Media

Social media is more important to young people for communicating with close friends than for making new friends or getting support and advice. Forty-three percent of teens and young adults say social media is "very" important to them for communicating with their close friends; far fewer (26%) say it is very important for keeping up with what's going on in their social circle. And even fewer consider social media very important for feeling less alone (15%), making new friends (12%), or getting support or advice (12%).

Figure 11: Reported importance of social media in young people's lives

Among 14- to 22-year-old social media users, percent who say social media is important to them for:



Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,242 social media users ages 14-22.

Specific Actions on Social Media

Most young people report posting their own content to social media far less frequently than they check or scroll through other people's content. Among social media users, 30% say they post their own content daily; 33% do so once a week to a few times a week; 30% do so less often than once a week; and 7% say they never post their own content.

Among the specific actions young people say they "often" take on social media are "liking" other people's posts (50% of social media users do so 'often'), browsing other people's feeds without liking or commenting on them (29% often do this), sending direct or private messages to people (29%), commenting on other people's posts (17%), creating and sharing original content (17%), sharing links to content created by others (15%), posting selfies (11%), and deleting things they've previously posted (7% often do this).

Table 10: Reported frequency of specific actions on social media

Among 14- to 22-year-old social media users, percent who say they "often"

"Like" other people's posts	50%
Post on social media+	30%
Browse people's social media without liking or commenting on them	29%
Send direct messages through social media	29%
Comment on other people's posts	17%
Create and share original content	17%
Share links to content created by others	15%
Post selfies	11%
Delete things they previously posted	7%

⁺Percent who do this "daily"

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,242 social media users ages 14-22.

Positive and Negative Experiences and Reactions to Social Media

In general, teen and young adult social media users report getting more positive feedback than negative feedback on social media. For example, when asked how frequently they receive positive comments from others on social media, 32% say they "often" do; when asked how frequently they get negative comments from others on social media, just 3% say they "often" do. All told, a total of 82% say they "often" or "sometimes" get positive comments, while a total of 26% often or sometimes get negative comments (respondents may get both type of comments).

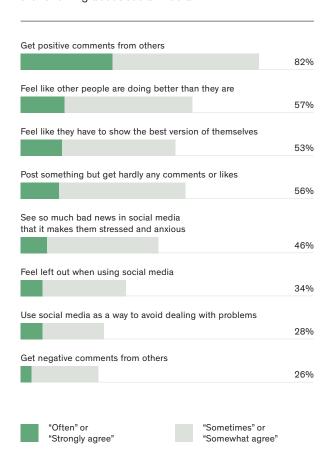
Similarly, nearly two-thirds (65%) say they "hardly ever" or "never" feel left out when using social media, compared to about a third (34%) who say they often (7%) or sometimes (27%) do. And TYAs are slightly more likely to disagree than to agree with the statement "I see so much bad news in social media that it makes me stressed and anxious" (53% disagree, including 21% who do so strongly, compared to 46% who agree, 9% strongly).

But TYA social media users are somewhat more likely to agree than disagree that they feel like they always have to show the best version of themselves on social media, with 53% agreeing (14% strongly) and 47% disagreeing (22% strongly). And a majority (57%) report feeling like other people are doing better than they are (15% often feel that way when using social media).

Some teen and young adult social media users have experienced or engaged in negative interactions or "drama" around their social media use, including 23% who say they've been "trolled" on social media (having somebody create intentionally conflict with them via social media), and 12% who say they've trolled somebody else. One in five (20%) say they have "stalked" someone on social media (extensively checking people out online without them knowing about it), and 18% have deleted a social media account after a personal conflict with somebody.

Figure 12: Reported positive and negative social media experiences

Among 14- to 22-year-old social media users, percent who say they "often" experience or "strongly agree" with the following about social media



Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,242 social media users ages 14-22.

Use of Social Media When Feeling Depressed, Stressed, or Anxious

As part of the survey, we asked respondents directly how they experience social media when they are already feeling depressed, stressed, or anxious. This was asked of all respondents regardless of their PHQ-8 score. Overall, the majority of teen and young adult social media users say they don't have a primarily negative or positive response to using social media in these circumstances: 57% say that using social media doesn't make them feel better or worse, and 65% say it neither connects them to helpful support and advice nor sends them "down a rabbit hole" (into a complex labyrinth of content from which they find it hard to disengage). But more teens and young adults say using social media when they are depressed, stressed or anxious makes them feel better (27%) than the number who say it makes them feel worse (15%); and one in five (20%) say it connects them to helpful support and advice, compared to 15% who say it sends them "down a rabbit hole" instead.

Social Media Use Among Young People With and Without Depressive Symptoms

In this section of the report, we explore the differences and similarities in how young people report using and responding to social media, based on whether or not they exhibit depressive symptoms as measured on the PHQ-8 depression scale. As discussed previously, we have classified respondents into three groups for these analyses: those with "no" depressive symptoms, those with "mild" symptoms, and those with "moderate to severe" depressive symptoms. For clarity, we focus the bulk of our discussion below on a comparison between those with moderate to severe depressive symptoms and those with no symptoms; data for those in the middle group ("mild" symptoms) are also included in the tables. For simplicity, we occasionally refer to the group with no symptoms as those "without depression" or those who "are not depressed."

Frequency of Social Media Use, by Depressive Symptoms

This survey did not find a statistically significant association between how frequently young people use social media and their current symptoms of depression. Sixteen percent of survey respondents with no depressive symptoms, as indicated by PHQ-8 scores, described themselves as "almost constant" users of social media, as did 21% of those who suffer from moderate to severe depression (not a statistically significant difference). There were also not significant differences in the proportion that described their social media use as less than constantly, but "several times a day" (62% of those with no symptoms and 59% of those with moderate to severe depression). It should be noted that because this survey only captures respondents' self-reported social media use, we do not know how well these findings correlate with objectively-measured behavior. And because this survey did not ask respondents to estimate the total amount of time they spend on social media per day, it is possible that there are differences in the length of time devoted to social media use that don't show up in our measures of frequency of use.

When we asked respondents directly whether they think they spend too much time and energy on social media in general, the difference between groups was not statistically significant (29% of those with moderate to severe depressive symptoms said yes, compared to 18% of those with no symptoms).

However, young people who are experiencing moderate to severe depressive symptoms are significantly more likely to report having taken a break from social media at some point (62%, compared to 40% of those with no symptoms). This may indicate a higher need to take a break (e.g., they experience more online conflict), it may be a reflection of an ability to self-regulate social media use during periods of depression, as discussed below, or be due to other factors entirely.

Table 11: Reported amount of social media use, by depressive symptoms

Among 14- to 22-year-old social media users

	Depressive symptoms		
	None	Mild	Moderate to severe
Self-reported frequency of social media use:			
"Almost constant"	16%	14%	21%
Daily, but less than constant	62%	73%	59%
Percent who say they:			
Spend "too much" time/energy on social media	18%	29%	29%
Have ever taken a break from social media	40%ª	61% ^b	62% ^b

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22. Note: Superscripts are used to denote statistical significance across rows at p<.05. Items with no s uperscripts, and items that share a common superscript, are not significantly different.

Use of Specific Social Media Platforms, by Depressive Symptoms

The survey found few differences in social media platforms used by young people with various degrees of depressive symptoms. There was no difference in which of the major sites they "ever" use, such as Facebook, Instagram, and Twitter. Those with moderate to severe depressive symptoms are more likely to "ever" use Tumblr (18%) than those with no symptoms (7%). Nor was there a difference by depressive symptoms in which site they use "most often," with one exception: those with moderate to severe depressive symptoms are less likely to say that Snapchat is the site they use "most often" (20%, compared with 37% of those with no depressive symptoms). It is not clear from the data in this survey why this correlation might exist.

Importance of Social Media, by Depressive Symptoms

Young social media users with moderate to severe depressive symptoms are more likely than those with no symptoms to say that social media is "very" important to them for feeling less alone (30% compared to 7%); for getting inspiration from others (27%, compared to 13%); and for expressing themselves creatively (26%, compared to 13%). In other words, it appears that for teens and young adults with moderate to severe depressive symptoms, social media is even more important than it is for others their age when it comes to inspiration, creative expression, and reducing feelings of isolation.

Table 12: Importance of social media, by depressive symptoms

Among 14- to 22-year-old social media users

	Depressive symptoms		
	None	Mild	Moderate to severe
Percent who say social media is "very" important to them for:			
Feeling less alone	7%ª	18% ^b	30% ^b
Getting inspiration from others	13%ª	20%	27% ^b
Expressing themselves creatively	13%ª	23% ^b	26% ^b

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,242 social media users ages 14-22. Note: Superscripts are used to denote statistical significance across rows at p<.05. Items with no superscripts, and items that share a common superscript, are not significantly different.

Specific Actions Taken on Social Media, by Depressive Symptoms

One question this survey wanted to explore was whether young people with depressive symptoms report using social media differently than others do, including whether they engage in various common social-media actions at a different frequency than their peers. Accordingly, the survey asked respondents to report how often they "like" or comment on other people's posts, browse others' feeds without liking or commenting on them, send private messages to people, create and share original content, share content created by others, post selfies, and delete things they previously posted. Of all these actions, the only one that youth with current moderate to severe depressive symptoms report doing with a different frequency than those without any symptoms is "like" other people's posts: 62% of young social media users with moderate to severe depressive symptoms often do that, compared to 47% of non-depressed social media users. There are also no statistically significant differences in how often the two groups say they post content in general (29% of moderate-to-severely depressed social media users post content to social media daily, compared to 32% of non-depressed users.)

In-person vs. Online Communication, by Depressive Symptoms

One interesting difference between the two groups is that those with moderate to severe depression are more likely to say they prefer communicating with people through social media than in person (42% agree with that statement, compared to 25% of youth with no depressive symptoms), including 17% who "strongly agree" (compared to 4% of non-depressed youth).

Table 13: Active v. passive social media use, by depressive symptoms

Among 14- to 22-year-old social media users

	Depressive symptoms		
	None	Mild	Moderate to severe
Percent who post to social media "daily"	32%	28%	29%
Percent who "often":			
"Like" other people's posts	47%ª	44%ª	62% ^b
Browse others' posts without liking or commenting	24%ª	36% ^b	32%
Comment on other people's posts	18%	15%	16%
Direct message others	28%	33%	29%
Create and share original content	18%	15%	20%
Share links to others' content	13%	16%	18%
Post selfies	9%	8%	17%

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,242 social media users ages 14-22. Note: Superscripts are used to denote statistical significance across rows at p<.05. Items with no superscripts, and items that share a common superscript, are not significantly different.

Positive and Negative Experiences and Reactions to Social Media, by Depressive Symptoms

Response from others. Most respondents, regardless of level of depressive symptoms, are more likely to report that they frequently receive positive comments than they are to report frequently receiving negative comments on social media. For example, 24% of social media users with moderate to severe depressive symptoms say they "often" get positive comments and just 5% say they "often" get negative comments. When we add in the percent who say they "sometimes" get positive or negative comments on social media, youth with moderate to severe depressive symptoms are still nearly twice as likely to report getting positive than negative comments. However, this positive tilt is less strong for these young people than it is for those without depressive symptoms: those with moderate to severe depressive symptoms are less likely to report getting positive comments and more likely to report getting negative comments on social media than their non-depressed peers. Seventy-three percent of young people with moderate to severe depressive symptoms say they "often" or "sometimes" get positive comments, compared to 89% of those who have no depressive symptoms. And 38% of them often or sometimes get negative comments from others, compared to 17% of non-depressed youth.

Table 14: Active v. passive social media use, by depressive symptoms

Among 14- to 22-year-old social media users

	Depressive symptoms			
Percent who often/sometimes:	None	Mild	Moderate to severe	
Get positive comments from others				
Often	37%	33%	24%	
Often/Sometimes	89%ª	78% ^b	73%⁵	
Get negative comments from others				
Often	1%ª	6% ^b	5%	
Often/Sometimes	17%ª	35%⁵	38%⁵	
Post but get hardly any comments or likes				
Often	7%ª	8%ª	29%⁵	
Often/Sometimes	43%ª	64% ^b	71% ^b	
Percent who have ever:				
Been "trolled" by someone	14%ª	35%⁵	31% ^b	
"Stalked" someone	16%ª	19%	31% ^b	
Deleted an account after a personal conflict	10%ª	23% ^b	30% ^b	

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,242 social media users ages 14-22. Note: Superscripts are used to denote statistical significance across rows at p<.05. Items with no superscripts, and items that share a common superscript, are not significantly different.

Social Media Use and Mental Well-Being

Social Media Use Among Young People With and Without Depressive Symptoms

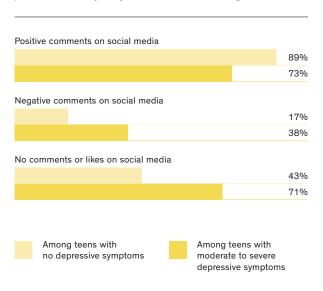
In a similar finding, the survey indicates that those with moderate to severe depressive symptoms are more likely than those with no symptoms to say they "often" post something on social media, but get hardly any comments or likes on it at all, whether positive or negative (29%, compared to just 7% of those with no depression; including those who say this "sometimes" happens, the difference is 71% vs. 43%). Again, this lack of response may be a function of the nature of their posts; it may be a reflection of their loneliness or isolation from others; it may be a reflection of a negative response bias on the part of those living with depressive symptoms; and it may be a factor that contributes to their mental well-being – from this survey we have no way of knowing how or why these variables correlate with one another, only that they do.

Online "drama." Young people with depressive symptoms who use social media are more likely than non-depressed youth to say they have experienced or engaged in some negative actions (or "drama") around their social media use, including being "trolled" on social media (having somebody intentionally create conflict with them via social media, 31% of moderate to severely depressed social media users vs. 14% of their non-depressed peers), "stalking" someone on social media (extensively checking people out online without them knowing about it, 31% vs. 16%), and deleting a social media account after a personal conflict with somebody (30% vs. 10%).

Reactions to news content and use of social media to avoid problems. Young social media users who are coping with depressive symptoms are more likely than those who are not to say they feel stressed and anxious from the bad news they see in social media. Nearly two-thirds of those with moderate to severe depressive symptoms agree at least somewhat that they see so much bad news in social media that it makes them feel stressed and anxious, compared to 35% of those without depressive symptoms. They are also more likely to say they "often" use social media as a way to avoid dealing with their problems (14% compared to 3% of those without depression).

Figure 13: Types of comments received on social media, by depressive symptoms

Among 14- to 22-year-old social media users, percent who say they often or sometimes get:



Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,242 social media users ages 14-22. Note: All differences between the two groups depicted in this chart are statistically significant at p<.05.

Self-presentation and comparison to others. One concern many advocates have had is the degree to which young people feel what is sometimes called "presentation pressure" – the pressure to always have to present their "best selves" online. Interestingly, young people with depressive symptoms are not significantly more likely than their non-depressed peers to "strongly agree" that they feel like they have to present their best selves online (18% of moderate to severely depressed youth, compared to 13% of those with no symptoms). A total of 63% agree at least "somewhat" with the statement (as do 50% of those with no depression), indicating that this pressure does pose at least some level of concern for a majority of young people with depressive symptoms, and half of non-depressed youth.

A third of young people with moderate to severe depressive symptoms say that when they use social media, they "often" feel that other people are doing better than they are, a rate far higher than that among non-depressed youth (32% compared to 7%). They are also far more likely than their non-depressed peers to say that when they use social media they often feel left out (18% "strongly agree" compared to 1%).

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,242 social media users ages 14-22. Note: Superscripts are used to denote statistical significance across rows at p <.05. Only those items with no common superscript differ from one another significantly. Items with no superscripts, and items that share a common superscript, are not significantly different.

Table 15: Response to social media use, by depressive symptoms

Among 14- to 22-year-old social media users, percent who say they experience the following when using social media:

	Depressive symptoms		
	None	Mild	Moderate to severe
Feel like other people are doing better than they are			
Often	7%ª	17% ^b	32%°
Often/Sometimes	46%ª	70% ^b	64% ^b
Feel left out			
Often	1%ª	8% ^b	18%°
Often/Sometimes	21%ª	39% ^b	57%°
Use social media as a way to avoid dealing with your problems			
Often	3%ª	6%	14% ^b
Often/Sometimes	16%ª	38% ^b	39%⁵
Feel like they always need to show the best version of themselves online			
Strongly agree	13%	14%	18%
Strongly/somewhat	50%	49%	63%
See so much bad news in social media that it makes them stressed and anxious			
Strongly agree	4%ª	9%ª	21% ^b
Strongly/somewhat	35%ª	51% ^b	65% ^b
Prefer to communicate with people through social media than in person			
Strongly agree	4%ª	5%ª	17%b
Strongly/somewhat	25%ª	35%	42% ^b

Social Media Use When Feeling Depressed, Stressed, or Anxious, by Depressive Symptoms

In this survey, we asked all young people (regardless of PHQ-8 score) directly how using social media makes them feel when they are already "feeling depressed, stressed or anxious." We wanted to know, from their perspective, whether social media is perceived to be a positive or negative resource during those times. We then explored how teens and young adults with moderate to severe depressive symptoms on the PHQ-8 responded to the questions about how using social media makes them feel when they are depressed, stressed, or anxious, as compared to young people with no depressive symptoms on the PHQ-8.

Overall, TYAs with moderate to severe depressive symptoms are more likely to say that using social media when they are feeling depressed, stressed, or anxious usually makes them feel better (30%) rather than worse (22%); about half (47%) say it doesn't make them feel better or worse. However, the 22% who say it usually makes them feel worse in those instances is far higher than the 7% of TYAs without depressive symptoms who say the same. TYAs with moderate to severe depressive symptoms are also more likely to say that using social media during those times helps connect them to support and advice (25% v. 13% of those without depressive symptoms), and to say that it sends them "down a rabbit hole" (29% vs. 9%). In other words, young people with moderate to severe depressive symptoms on average report heightened positive and negative reactions to social media when feeling stressed, anxious, and depressed as compared to youth without depressive symptoms.

Table 16: Reported effect of social media when feeling depressed, stressed, or anxious, by depressive symptoms

Among 14- to 22-year-old social media users

	Depressive symptoms		
	None	Mild	Moderate to severe
Percent who say it makes them feel:			
Better	24%	30%	30%
Worse	7%ª	22% ^b	22% ^b
No different	68%ª	47% ^b	47%b
Percent who say it:			
Connects them to helpful advice and support	13%ª	29% ^b	25% ^b
Sends them down a rabbit hole	9%ª	10% ^b	29% ^b
Neither	76%ª	60% ^b	46%b

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,242 social media users ages 14-22. Note: Superscripts are used to denote statistical significance across rows at p<.05. Items with no superscripts, and items that share a common superscript, are not significantly different.

In Their Own Words

Teens and Young Adults on the Positive Aspects of Using Social Media When Feeling Depressed, Stressed, or Anxious

Although this question appeared late in the survey, hundreds of people responded. About one-third of those who wrote an answer cited the value of being distracted. Another third said that actions taken or words shared by nice people were a big help. Others said they looked for positive, inspiring content to cheer them up.

"I'm able to talk
to people who have
experienced what I have
and are able to share
what they did to fix
their issues."

- 21-year-old Black female

"I can post something	g and fish for people who	
understand what I w	vrote about to relate with mo	ر م

- 14-year-old White male

"It just helps me feel outside myself for a bit and find interesting topics I'd like to ponder on. When you're depressed, it's easy to get caught in a loop but through actively reading every day through social media I can always be preoccupied with information."

- 20 year-old White female

"By connecting to some of the online friends I've already met, they help support me. I use it to share music or memes that make us laugh, slowly taking the sorrow away."

- 21-year-old Black male

"I find people with similar things that are making me sad and I read about how they handle it."

- 14-year-old White female

ightarrow VIEW MORE QUOTES

Teens and young adults on the negative aspects of using social media when feeling depressed, stressed, or anxious

The most popular theme was that the content of other people's posts made them feel left out or inferior. Another theme was that current events are negative and depressing, which adds to their sad mood.

"I scroll through feeds
of everyone having fun
with each other while
I'm stuck at home doing
nothing about it."

- 15 year-old White male

"Usually friends post happy things - getting together with others, accomplishments, bragging - I don't always want to see it when I'm feeling down about myself so I stay off social media."

- 14 year-old White female

"Being broke but seeing your friends go out to fun places or eat but [you] can't join because [you have] no money or just seeing how successful they are while you struggle just to get by."

- 21 year-old Latino male

"Whenever I'm having an anxiety attack
I have to put down my phone and calm down."

- 22 year-old Black female

"I feel like I am not good enough compared to other people.

I often look at other people['s] pages and compare myself to them."

- 19 year-old White female

ightarrow VIEW MORE QUOTES

Conclusion

The survey results presented in this report address two related but distinct issues: First, how teens and young adults say they're using digital health information and tools, and second, the association between reported social media use and mental well-being – including depression – among this age group.

The findings make one thing abundantly clear: The digital health revolution has arrived for this generation of young people. Technology and the internet have transformed how teens and young adults search for information, share stories and experiences, and connect to one another about health. Large numbers of young people are turning to online sources for information on health issues, using health-related mobile apps, posting their health experiences online, and looking for others who have the same health concerns they do.

Now we need to ask ourselves whether the rest of us are doing our part to help meet their needs.

For example, how effectively are we reaching young people with digital health resources? The majority of young people who have gone online for health information, used mobile health apps, or connected to peers online consider those experiences at least "somewhat" helpful. But with vast gaps in our knowledge of whether and which digital health tools are efficacious, and with just 20-30% of our sample's users saying these resources were "very" helpful, there is a need for better resources and better evaluation.

The survey also reveals young people's tremendous interest in and exposure to other people's health experiences. This may well be the generation that revolutionizes the peer-to-peer health experience. Technology has afforded them the tools to seek out people who may be halfway around the world who are facing similar health challenges; to connect with and exchange information with them; to listen to those people's personal experiences and to share their own. How might we help people navigate this new landscape?

We hope that the insights and data concerning young people who are coping with depressive symptoms will be especially useful. These teens and young adults report that they are actively seeking help with maintaining their mental well-being. Large proportions of young people are searching online for information and trying to connect with peers about depression, stress, and anxiety. And those who have moderate to depressive symptoms say they are doing so in even larger numbers.

Our exploration of young people's social media use indicates that the relationship between social media and depression is complex. And again, this survey is intended as a beginning – an attempt to gather descriptive data about the many ways young people use social media, and to uncover how these accounts vary based on individuals' responses to a measure of depressive symptoms. We hope that the data provide inspiration for further study and exploration of how teens and young adults curate and regulate their social media use. How might we create resources to support them?

The survey also offers evidence that the youth-focused digital health field is ripe with potential for positive change. We hope the insights provided here will help guide the many players in this field.

- For public health advocates, the message is that investment in digital health resources for youth is money and time well spent – 87% of young people have looked online for health information and nearly all find it at least somewhat useful, meaning they are likely to be return customers.
- Patient advocates can be heartened to know that four in ten teens and young adults have gone online to look for people with similar health concerns, and we now know more about their strategies than ever before: reading blogs, following hash tags and specific people on social media, and joining online discussion forums. These findings suggest that it is possible that the "long tail" of the internet could connect people and unlock well-being for those who would otherwise remain isolated.
- Health care providers should note young people's deep engagement with online health resources, be respectful of their choices, and understand that if they want to reach young health consumers directly, they have a massive opportunity to do so using digital tools. And they should get ready for telehealth: 20% of teens and young adults have already connected with clinicians via text, app, online messaging, or video chat.
- LGBTQ advocates need our full support as they address the
 massive desire for digital tools related to mental health and
 mental well-being among gay and lesbian teens and young
 adults. No other demographic in this sample came close to
 this one when it comes to both high need and huge opportunity.

- Social media companies have an opportunity to play a central role in public service, awareness, and action campaigns related to health.
- Policymakers at the federal, state, and local levels can use these findings to write new playbooks on how to reach young people with public outreach campaigns.

There is much more work to be done, and future research will delve deeper into these data which can serve as a rich source of information.

Finally, we are grateful to all of the young people who took part in this survey project, and especially all of those who took the time to share their personal digital health experiences with us through the openended items on the questionnaire. It is an emotional experience to be offered this glimpse into the lives of so many young people – to see how important health concerns are in so many of their lives. These youth should be proud of the many ways they are innovating solutions to their health challenges; we can all learn from their openness and use of digital tools to connect with resources and with each other.

And for all those who are working to provide health-related tech tools and solutions for young people, this is an enormous validation that you are on the right path.

Appendix

Demographic Differences in Depressive Symptoms

This survey is not intended as a comprehensive analysis of the extent and severity of depressive symptoms among teens and young adults. The primary purpose of including measures of depressive symptoms in the survey is to explore how those young people coping with depression use digital health resources and social media, and whether their patterns of use are different than among those without depression. However, in considering the results, it is important to keep in mind that certain demographic groups in this sample are more likely to experience depression than others.

One way of exploring differences among demographic groups is by looking at the percent of respondents who fall into each level of severity. Using this method, we can see in the table below that there are some differences by gender, with 24% of females exhibiting moderate depressive symptoms, compared to 9% of males. But the most pronounced differences – and they are dramatic – are by sexual orientation. More than half (59%) the teen and young adult LGBTQ respondents in our survey exhibit moderate to moderately severe symptoms of depression, compared to 20% of the heterosexual survey population. And more than one in four (29%) LGBTQ respondents are classified at the moderately severe to severe level, compared to just 5% of the straight population in this survey. (There were no statistically significant differences by race/ethnicity).

Table 17: Categorical levels of depressive symptoms, by demographics

Level of depressive symptoms	Among All	Age		Gender		Sexual Orientation	
		14-17	18-22	Male	Female	Straight	LGBTQ
None (0-4)	52%	67%ª	40% ^b	58%ª	47% ^b	58%ª	19%⁵
Mild (5-9)	23%	20%	26%	24%	23%	22%	22%
Moderate to severe (10-24)	25%	13%	35%⁵	18%ª	30% ^b	20%ª	59%⁵
Moderate (10-14)	17%	9%ª	23% ^b	9%ª	24% ^b	15%ª	30% ^b
Moderately severe (15-19)	5%	3%	7%	7%	3%	4%ª	13% ^b
Severe (20-24)	3%	1%	5%	2%	3%	1%ª	16% ^b

Source: Hopelab/Well Being Trust Teens and Young Adults Survey, February-March 2018. N=1,337 young people ages 14-22 Note: Superscripts are used to denote statistical significance at p<.05. Items with no superscripts, and items that share a common superscript, are not significantly different. Significance should be read across rows within demographic categories. Levels of depressive symptoms are based on respondents' scores on the Patient Health Questionnaire (PHQ-8) Depression Scale.

Young people, online health information, and peer-to-peer health resources

- "I have type 1 diabetes and tried to find a group of teenager type 1's on Facebook. I did. It was cool. Made some friends."
- 14-year-old White male
- "I found a very good friend in another country that had the same condition as I did, and it was truly inspiring to have the freedom to tell them about it and likewise them to me!"
- 21-year-old Latino male
- "Heart disease research when my grandpa had to put stents in, found out what it was all about via searching Google. Felt very confident in the procedure once I read other people's experiences with it."
- 16-year-old White female
- "I wanted to know something about birth control and people had the same questions and it helped me know that I wasn't alone."
- 21-year-old Latina female
- "My mom was making me get the hepatitis A vaccine and [another] one for HPV and I didn't know what the shots were for, and I was too scared to ask the nurse about it, especially after she started talking about gay sex & warts, so I went online to [a medical website] and tried to research it myself. It's still hard to do that when you don't what the words mean. I finally asked my mom & she sat down with me, and we got online and did the pros & cons. I felt better after cause she was explaining what I didn't understand."
- 14-year-old White female
- "I asked about the electric cigarettes to quit smoking; a lot of people had something to say but I asked if the gum or those cigarettes are addicting. Because my friend can't seem to stop using them."
- 17-year-old Latino male

- "I went on a chat forum for people with eating disorders. I made a friend that I keep in touch with. We talk about what we have been eating recently and how we have felt about our situation."
- 15-year-old female
- "I shared my experience with IBS [irritable bowel syndrome] on Facebook and gave tips [for] major flair ups."
- 22-year-old female
- "Three years ago, as a female my body started to have irregularities and [I] thought it was only me until I searched online for other women who had the same concerns. Turns out I have Polycystic Ovary Syndrome and [it] is treatable."
- 22-year-old female
- "I read someone's [story of their]... recovery [from] trichotillomania [pulling out one's hair] and found it inspiring and relieving that I wasn't the only person experiencing this compulsion since childhood."
- 20-year-old female
- "I shared my scoliosis journey and spinal surgery and updates on post-surgery recovery."
- 20-year-old female
- "I have watched several people detail their fitness routines and how they used it to beat mental health disorders such as body dysmorphia and those affected by obesity and food addiction."
- 22-year-old Black male
- "I've watched several videos that are first person accounts of coping with depression and anxiety. I can't give specifics, because there were a few separate instances and all were not very memorable. It was about finding a sense of 'I'm not the only one', not about finding out about a specific person's struggle."
- 22-year-old White female

- "I've had POTS [Postural Orthostatic Tachycardia Syndrome] since I was 16, it made me pass out 1 to 5 times a day. I looked online to see how other people dealt with it. I found one lady who's POTS is so bad she's been pronounced dead 37 times because her [heart] stops when she has a dizzy spell."
- 21-year-old female
- "I watched videos of people talking about their family member's eating disorders, because my roommate had one and I didn't know how to support her."
- 21-year-old White female
- "I had been having a really rough week. My depression had been really bad and I was feeling really stressed and anxious about school. I posted on Instagram about my struggles with my classes and how I was feeling, and I was met with lots of encouraging words. Someone even direct messaged me and told me they were going through a similar situation. It really helped me pick myself up."
- 16-year-old White female
- "I had recently received information about my health regarding a personal condition. I was scared, and I researched online to find others with this condition."
- 21-year-old Latina female
- "I told others how I experienced depression. How it developed, what it did to me and how it affected those around me. I also told of what helped me cope and get through it in the end. The other people either congratulated me or asked me for advice on the topic."
- 22-year-old White male

- "I had a family member who has skin cancer and I was wondering about treatments and effects of skin cancer. I ended up finding lots of info that proved to be helpful and ease my worries."
- 14-year-old White male
- "I actually responded on a Reddit thread to add to a conversation debating whether people trivializing mental illnesses by comparing them to habits/quirks and feelings it's possible to feel without actually being mentally ill is damaging. (Example: being anxious about a big test vs. actually having anxiety and dealing with it on a daily basis because of your brain)."
- 20-year-old Latina female
- "Watched videos of abuse survivors to feel less alone. It helped validate my experience and what I went through. Made me not feel as alone and motivated me to really improve my own situation."
- 20-year-old Latina female

Teens and young adults share about their favorite mobile health apps

- "I use [a breathing app] to help me fall asleep when I have trouble relaxing. It times my breathing inhale 4 seconds, hold 7 seconds, and exhale 8 seconds and that usually calms me down enough to fall asleep."
- 14-year-old White male
- "[A fitness app] helped me lose 90 lbs! It was great for calorie counting and kept reminding you to keep it up."
- 14-year-old White male
- "Pregnancy apps. I can't remember the name but the information they give about your baby's progress is always helpful in helping your baby grow healthy."
- 22 year-old White female
- "My favorite health related app is [one on addiction and sobriety]. I'm bulimic and it helps me try and stop bingeing and purging."
- 22 year-old female
- "I used an app on my phone to keep track of how many cups of water I was drinking a day. It helped me stay on top of the habit but I slowly stopped using it as drinking water became second nature for me."
- 22 year-old female
- "[A meditation app] was real cool, it helped me refocus and understand awareness."
- 22 year-old female
- "I like the app [I used] to track my menstrual cycles. My cycles are very abnormal, so with their algorithm, it gives me a bit of a clue when my cycle will arrive."
- 22 year-old female

- "I recently found a meditation app that I use every day. They offer meditation sessions, adult sleep stories, relaxing music, ambient calm background noises, etc. I love this app and it has helped me reduce my anxiety. It offers so many things in one app and that is what I love the most. The sleep stories that they offer are super helpful. I used to struggle with falling asleep and staying asleep, but since using this app, I have had amazing nights of sleep."
- 16 year-old White female
- "My favorite app is [one on depression], it's helpful to me because I get to talk with people struggling with the same things I am."
- 20 year-old White female
- "[An app for a medical information site] provided lots of information and had a way to put in your symptoms to figure out what sickness you have."
- 14 year-old White male
- "[A pregnancy app] has been guiding me through my pregnancy."
- 21 year-old Hispanic female
- "A period tracker app has been very helpful for me because it keeps up with not only my period but my ovulation, symptoms, tells me my next period date, etc. BEST app ever!!!"
- 20 year-old Black female
- "I have an app that basically gives you a bit of inspiration every morning to be you and love yourself. It helps me take time for me instead of rushing around at 6 in the morning stressing about the day."
- 14 year-old female

- "[A meditation app I use] is one of the app store's most popular apps for a reason, is a good way to just start my day with a little mediation and focus on nothing for a little bit. They also have guided meditations and sleep stories as well, so it is a very useful app."
- 20 year-old male
- "My favorite health-related app is the sleep tracking app on the Apple store. It helped me track my manic nights where I experience racing thoughts."
- 20 year-old female
- "It was a water app and it reminded [me] when to drink water."
- 16 year-old Hispanic male
- "I have an app that lets me view my current blood glucose level whenever I open the app. It's really cool."
- 14 year-old White male
- "The app I like to use is a period tracker. It also gives facts about symptoms you feel throughout the month. It's helpful because whenever I'm feeling a certain way and not sure if its period related I always go check how many days till my cycle and it usually makes me feel better."
- 14 year-old White male
- "Speech app for those children with difficult speech to communicate with each other."
- 16 year-old Black male
- "I have [a calendar app] on my phone. It reminds me to take my medicines (allergy, sleep, and birth control) and it tracks my period."
- 16 year-old White female
- "It is an app that has a guy talking in a soothing voice giving instructions on how to meditate, sometimes there is an animation that goes along with it. It helps when I start to feel a lot of stress in life because I go to the app and try to unwind and not worry/stress so much."
- 21 year-old White male

- "I used [a wearable device] to track exercise, sleep and caloric intake. The numbers really didn't mean anything to me and it took forever to enter in the data, so I stopped using it. It was only helpful in exposing me to just how much calories are in some of my food."
- 20 year-old male
- "[A sleeping app] helped me wake up in the morning."
- 15 year-old white male
- "My favorite app is [one on depression], it's helpful to me because I get to talk with people struggling with the same things I am."
- 22 year-old female
- "[An app from a running shoe company] helps make me want to run."
- 22 year-old male

Young people, depression, and online health resources

- "A mood tracker and virtual diary has helped me to determine when my depression and anxiety have been bad enough to consider asking my doctor about changing my medicine."
- 22-year-old White female
- "I search for people on YouTube that were posting about their anxiety disorders and it help me understand that I needed to tell my mother about mine."
- 17-year-old White female
- "I wanted to understand the mental health diagnosis I was given and looked up exactly what it was and other people's experiences with such illness. I did find what I was looking for and it did help because it helped me realize that I wasn't alone."
- 20-year-old Latina female
- "I was not doing well with my anxiety and depression but I looked it up and decided to talk to my mom and am doing better."
- 20 year-old male
- "[I went online] for ideas on how to deal with stress and anxiety in a natural way and pretty much just looking for advice.

 Although I didn't really find any groundbreaking advice, what was really helpful was finding other people in the same situation."
- 21-year-old female
- "I currently use an app for depression, it helps me relax, clear my mind, decrease stress, focus and sleep."
 - 22-year-old Black female
- "My friend was going through a rough time and I didn't know how to help him, so I went to Google to find answers on what to do. It didn't exactly help, it just told me things that I already knew."
- 14-year-old White male
- "I was having panic attacks and wanted to know more about taking [a mood stabilizing medication]."
- 16-year-old White female

- "I have talked regularly in the past on various social media about my own struggle with depression and how it affected the course of my life."
- 22-year-old Latina female
- "[A meditation app I use] introduces you to and talks you through mindfulness meditation which can be extremely helpful dealing with anxiety and sensory overload."
- 21-year-old Black male
- "Depression over feeling left out in various social group in high school. I found out my feelings were common and that they'd go away, but I wouldn't say that was helpful. I thought if it was so common I wouldn't bother anyone about it."
- 14-year-old female
- "I love [my favorite app] because it helps keep my thoughts away from self-harm."
- 20-year-old Latina female
- "A friend from co-op has been suffering from all three due to being sexually assaulted. I found many different sites that talked about how to help someone in that situation. Did it help? Most of the help I was able to provide was in spending time with her and learning how to help her specifically. So the online stuff gave me some ideas, but it was too general."
- 14-year-old White female
- "[I used] an app for depression and other diseases...it helped me because I could talk to people who would actually listen to me I would recommend the app to anyone going through any struggle in their life...including you, reader."
- 22-year-old Black male
- "A friend of mine was always sleeping and sad so I looked it up and I told her mom that I thought my friend was depressed."
- 17-year-old Latino male

"I watched a YouTube video of a girl who went through a similar experience as me. She was unable to find a job after graduating from college and fell into a deep depression. She talked about how eventually she got out of the depression when she found a better job that was unrelated to her field."

- 21-year-old Latina female

"I watched YouTube videos about people also going through situational stress and anxiety, particularly others experiencing the same thing I was – trying to juggle work and school and be successful at both of them."

- 22-year-old male

Teens and young adults on the positive aspects of using social media when feeling depressed, stressed, or anxious

- "It just helps me feel outside myself for a bit and find interesting topics I'd like to ponder on. When you're depressed, it's easy to get caught in a loop but through actively reading every day through social media I can always be preoccupied with information."
- 20 year-old White female
- "It directs my focus elsewhere. I can laugh at other people being silly, or animals being cute."
- 17-year-old Latina female.
- "It makes me feel better because I can read encouragement and find inspiration to keep myself motivated when I am feeling anxious. I can reach out or comment on a photo or a post that I relate to or that I admire to make the other person feel good too."
- 19 year-old female
- "If I'm feeling depressed, getting on Twitter and seeing funny tweets or watching funny videos on YouTube can really brighten my mood. And when I'm feeling anxious, it's a good way to keep my mind thinking about other things by reading people's posts rather than thinking about how nervous I am, especially in public."
- 21 year-old White female
- "I follow a lot of positive pages on social media, so I feel better when I see a funny video or a cute video. I guess it's better put like this: I would rather have a bunch of small moments where I feel the smallest bit of happiness or relief than to have a never-ending feeling of depression or anxiety."
- 21 year-old Latina female
- "It's much easier for me to reach out for help on social media than in person. There's less pressure and I can leave it there and live my life outside of it without thinking about it too much. It's also a place for me to share my music and art and see other people's work when I wouldn't be able to otherwise, so that creative outlet is extremely helpful to me."
- 22 year-old Latina female

- "My family and friends offer their positive opinions and support."
- 22 year-old Latino male
- "Take my mind of off things by seeing what other people are doing and often being inspired by their posts."
- 21 year-old Latino male
- "Social media makes me laugh and keeps me distracted so that I have time to breathe and collect myself."
- 22 year-old respondent
- "Sometimes, I can temporarily distract myself when I'm feeling down, or I can look up tips for self-help (ex. links to guided meditation, yoga, etc.)"
- 22 year-old female
- "I'm able to talk to people who have experienced what I have and are able to share what they did to fix their issues."
- 21-year-old Black female
- "I can post something and fish for people who understand what I wrote about to relate with me."
- 14-year-old White male
- "I use it to browse memes and other internet culture things that make me laugh and forget why I'm upset. I also like looking at my friends' pages, especially when they don't live in the same state as I, because it makes me feel closer to them."
- 20-year-old Latina female
- "By connecting to some of the online friends I've already met, they help support me. I use it to share music or memes that make us laugh, slowly taking the sorrow away."
- 21-year-old Black male

- "I have a lot of internet friends who always pick me up when I'm down, so the second I feel down, I turn to them and all is right again."
- 20-year-old Latina female
- "Influences me to draw or make something new or try something new."
- 14-year-old Black male
- "I don't know how to describe it, but whenever I feel down, there are always people there to help me, whether my friends or strangers I've only met through the internet."
- 15-year-old White male
- "I like to look at what my friends are doing. It makes me happy to see them being happy. Takes my mind off my troubles and stress."
- 16-year-old White male
- "Sometimes I look back on my posts and remember how happy I was during that post and how I will feel like that again sometime in the future."
- 20-year-old Latina female
- "Social media allows me to rewrite my own narrative. When I'm depressed and anxious, creating another perfect alternative life for others to see feels validating to me. It reinforces the idea that maybe I'm not as badly off as I perceive myself to be. If others can believe it, I can almost convince myself."
- 22-year-old White female
- "Lets me know that others are going through the same things that I am."
- 17-year-old Latino male
- "I find people with similar things that are making me sad and I read about how they handle it."
- 14-year-old Latina female

Teens and young adults on the negative aspects of using social media when feeling depressed, stressed, or anxious

- "I feel like I am not good enough compared to other people. I often look at other people['s] pages and compare myself to them."
- 19 year-old White female
- "Usually friends post happy things getting together with others, accomplishments, bragging I don't always want to see it when I'm feeling down about myself so I stay off social media."
- 14 year-old White female
- "Being broke but seeing your friends go out to fun places or eat but [you] can't join because [you have] no money or just seeing how successful they are while you struggle just to get by."
- 21 year-old Latino male
- "Sometimes I feel "too connected" because I feel like I am not getting the space I need from people to re-energize when I am around people constantly and then having to respond to snaps and messages."
- 22 year-old White female
- "It shows me that other people are living their life while I'm on social media doing nothing."
- 14-year-old Black female
- "I feel like I never have anything to update because I am boring and my life isn't interesting to people and I don't want to annoy people."
- 22 year-old White female
- "Social media just reminds me of all the horrible things that are happening in our world right now."
- 20 year-old Latina female
- "Whenever I'm having an anxiety attack I have to put down my phone and calm down."
- 22 year-old Black female
- "I scroll through feeds of everyone having fun with each other while I'm stuck at home doing nothing about it."
- 15 year-old White male

- "I stop after posting some sad negative stuff and find an actual friend to meet with in person."
- 17 year-old White female
- "Social media, most times, makes things worse simply because I have told myself time and time again that I wouldn't spend so much time mindlessly scrolling through other people's lives. On a very rare occasion is something made worse due to actual content on social media."
- 22 year-old White female
- "People are always travelling and I'm busy cleaning toilets."
- 22 year-old White male
- "Generally if it makes me feel worse it is because I am seeing people that are doing "better" than I am in whichever ways I'm feeling bad about at that moment. Sometimes I am aware of how bad it makes me feel but I keep using it just because I want to continue my self-loathing."
- 22 year-old Black female
- "I see people that seem happier than I am. I stop after posting some sad negative stuff and find an actual friend to meet with in person."
- 17-year-old White female
- "Social media, most times, makes things worse simply because I have told myself time and time again that I wouldn't spend so much time mindlessly scrolling through other people's lives. On a very rare occasion is something made worse due to actual content on social media."
- 22-year-old White female
- "It is hard to measure up to what people post. They are always busier than me and more popular. Try to post more so people will reply."
- 14-year-old White male

"Social media consists of millions of people around the world making their lives seem better than others creating a false image of themselves. Sadly most of the pictures and stories created on social media are fake as hell too. What's even more sad to me is how people actually believe what they see and hear. I believe that social media should be a privilege and only used by a few amount of professionals not just given to anyone who thinks their good enough to do it. Just like driving."

- 20-year-old Latina female

"I feel even worse when I use social media when depressed or anxious because everyone else is usually having a better day, week, or life. Enjoying each other's company, not afraid to converse their feelings. Also I might see some bad news and I know can't say right things to try and make the situation better or to make sure my words are genuine and not something that person wanted to hear. So I usually spend my time on social media lurking and seeing what's going on, not really interacting with anyone."

- 20-year-old Black male

"Well I can't really describe it but when I get motivated to finally do something for myself, I always get so lost on Instagram and I feel really bad after I do because I feel like I wasted so much time doing nothing on it, and I could've put all that energy and focus on bettering my life and future decisions. I just don't know what it is but my whole life I thought I was gonna do something great by now but at 22 I haven't really done much of anything. I got picked on so much in high school that I just totally forgot about planning for college, I went to community college to years ago but it was absolutely horrible, and I use to love school but everything got bad after I entered middle school and my home life isn't any better I feel like I'm a complete burden on everyone. This just isn't the way I pictured my life going."

- 22-year-old Black female

"When I feel upset I just stay off social media all together."

- 20 year-old Latina female

Acknowledgements

This report is the result of collaboration between Hopelab and the Well Being Trust.

Hopelab is a social innovation lab focused on designing science-based technologies to improve the health and well-being of teens and young adults. For more information, please visit hopelab.org.

Well Being Trust is a national foundation dedicated to advancing the mental, social and spiritual health of the nation. Created to include participation from organizations across sectors and perspectives, Well Being Trust is committed to innovating and addressing the most critical mental health challenges facing America, and to transforming individual and community wellness. Learn more at wellbeingtrust.org and @WellBeingTrust

Primary Researchers

Victoria Rideout, M.A., is a veteran foundation executive and non-profit program director specializing in national survey research about youth and media. She was a vice president of the Kaiser Family Foundation, where she established and directed the Program for the Study of Media and Health.

Susannah Fox is the former chief technology officer for the U.S. Department of Health and Human Services. Prior to that role she was the entrepreneur-in-residence at the Robert Wood Johnson Foundation and an associate director at the Pew Research Center, where she led the health and technology portfolio.

Research Partners

Hopelab Jana Haritatos, Ph.D.; Emma Bruehlman-Senecal, Ph.D.

Well Being Trust Ben Miller, Psy.D.

Research Assistance

Tchiki Davis, Ph.D.

Survey

The survey was fielded by NORC at the University of Chicago, a non-partisan research institution that delivers reliable data and rigorous analysis to guide critical programmatic, business, and policy decisions.

Design and Production

Landscape®

Communications

Hopelab Shane Brentham

Well Being Trust Albert Lang