Tennessee v. Meta
Case No. 23-1364-IV

DX3484

EXHIBIT 15
6/26/26
PENGAD 800-631-6989

TEEN WELL-BEING AND SOCIAL MEDIA: OVERVIEW BRIEFING

The concerns around teen well-being and social media are only new on the surface. Parents have always worried about teenagers and how they spend their time, especially around the introduction of new information technologies. These new technologies have often been accompanied by panics, such as books being called "confusing and harmful" as early as the 16th century (x). Given the speed of mass adoption of the smartphone, there is logically a fear around teens' use of these devices, and of social media. Adding in the recent increases in teen mental health problems creates a perfect storm. However, there is strong reason to believe these incidents are not related to one another:

Research on teen mental health problems suggests that recent increases may be due to heightened awareness of depression and that the condition had been long under-diagnosed in previous decades (x) and the overall increases in anxiety disorders may be due to the inclusion of mild forms of anxiety as clinically diagnosed disorders (x). Research on teen well-being and digital technology use suggests that the association between digital technology use and adolescent well-being may be negative but small, explaining at most 0.4% of the variation in well-being and does not warrant policy changes (x). Large scale research suggests that there is little evidence for substantial negative associations between digital-screen engagement– measured throughout the day or particularly before bedtime– and adolescent well-being (x). More recently, longitudinal research has found that young adolescents' digital technology usage is not associated with elevated mental health symptoms (x).

That said, there is still a significant and important debate about the role of technology in general and social media specifically on teens. The memo below outlines what is known from academic literature (first section) as well as what we have learned from our internal research (second section).

Social media and teen well-being

In recent years, there has been criticism around social media's negative impact on teen well-being. One of the most prominent critics in this area is Jean Twenge, who received popular attention for her book "iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy– and Completely Unprepared for Adulthood– and What That Means for the Rest of Us" as well as her The Atlantic article "Have Smartphones destroyed a generation?" Twenge claims that increases in depression and youth suicide, lower academic achievement and political engagement, antisocial behavior and increased loneliness are the result of teens using smartphones and social media. Her arguments have been debunked both in the popular press (x, x, x) and in academia (x, x) for presenting a simplistic narrative for a complex phenomenon, presenting correlation as causation, cherry-picking confirmatory evidence for her claims, and misleadingly presenting trends. For a full rebuttal of Twenge's claims, please see here. Many of the long-term trends observed are linked to socio-cultural shifts in the US over the past 40 years, such as "pressures on the education system, growing social inequality, racial and ethnic tensions, labour market instability, growing precarity, student debt, drugs policy, political disaffection, the undermining of health and welfare provision" (x).

However, some aspects of teen well-being (life satisfaction, loneliness, depression, anxiety) have recently seen a reversal of long-term positive trends and warrant further attention. According to the most robust research studies to date, these downturns are not caused by social media or digital technologies (x, x). For example, a re-analysis of Twenge's data on depressive symptoms and teens concludes that social media accounts for little of the rise in depressive symptoms and that "the findings point to a need for alternative explanations (e.g. increased academic strain, prolonged effects of the Great Recession)" (x). Further, a re-examination of Twenge's claims of social media causing anxiety among teens showed her claims to be unsubstantiated (finding that the cited research studied adults and found completely different results than she had claimed) (x).

Instead of fear-based research and reporting, experts call for (a) taking cultural and social factors into account for population-level analysis for a holistic perspective (x), (b) taking an individual approach and understanding that not everyone is affected the same. For example, teens who are vulnerable 'offline' are more vulnerable 'online' – e.g. teens from lower SES backgrounds are at greater risk for negative consequences of their time spent online (x), and (c) using robust methodologies and study designs to measure teen well-being (x).

Yet, to date there are few representative studies on youth well-being and social media, and none that explicitly compare youth to adult well-being as it relates to social media (for a comprehensive literature review for adults' relationship between social media and well-being, see here). The largest scale research to date claims that the association between digital technology use and adolescent well-being is negative but small, explaining at most 0.4% of the variation in well-being and does not warrant policy changes (x). To illustrate the small effect size, one author states that eating potatoes has the same negative effect as social media on adolescent well-being (x). Additional research from 3 countries comparing time-use diaries suggests that there is little evidence for substantial negative associations between digital-screen engagement– measured throughout the day or particularly before bedtime– and adolescent well-being (x). The evidence indicates that moderate use of digital technology is not intrinsically harmful and may be advantageous (x). In addition, meta-reviews of existing research show mixed findings (positive / negative / non-significant) about the association between depression and anxiety and social media use (x, x). Another meta-review of 36 studies shows that teens are more adept than adults at integrating digital technologies into their everyday lives and use social media to enhance their friendships (x).

Digital technology use is considered beneficial to children's social relationships (x) and social media use in particular seems to be linked to better cognitive development, refuting earlier assumption that brain development in children is negatively impacted by social media (x,x). For children, "the most robust studies suggest that the relationship is U-shaped, where no use and excessive use can have a small negative impact on mental well-being, while moderate use can have a small positive impact" (x).

In summary, the body of research suggests that the relationship between teens' social media use and their well-being does not fit an "either/or" framework. Social media experiences can be positive or negative depending on the individual: Social media experiences can be organized across 4 dimensions that can result in both positive and negative effects: "Relational interactions contribute to both closeness and disconnection; self-expression facilitates affirmation alongside concern about others' judgments; interest-driven exploration confers inspiration and distress; and browsing leads to entertainment and boredom, as well as admiration and envy" (x).

Social media and teen mental health

The most common arguments concerning the relationship between social media and teens' well-being revolve around teens becoming more anxious and more depressed because of their social media use. This directional relationship is unsupported by existing research. In fact, there is increasing evidence that the directionality goes the other way – teens with mental health problems turn to social media for help and improvement (x). That said, when social media use displaces sleep in adolescents (via nighttime social media use), it is negatively correlated to indicators of mental health (x).

DEPRESSION. A recent nationally representative survey among US youth found that there is no correlation between reported frequency of social media use and reported depressive symptoms among teens and young adults (x). This survey did not find statistically significant association between depressive symptoms and how teens report using social media (i.e. "active" or "passive" behaviors on social media). Teens with depressive symptoms have HEIGHTENED experiences on social media, both more positive AND more negative. Teens and young adults with 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%). 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. Adolescents with depressive symptoms report both positive and negative effects of social media use (x). Positive practices include searching for positive content (i.e. for entertainment, humor, content creation) or for social connection. Negative practices include sharing risky behaviors, cyberbullying and for making self-denigrating comparisons with others.

ANXIETY. The directionality of the relationship between anxiety and social media use is unclear. Teens who report higher emotional investment in social media also display higher levels of anxiety (x). There is evidence to suggest that the relationship is such that more socially anxious teens tend to use social media more to communicate about personal and intimate topics. They "were motivated to use online communication significantly more frequently to compensate for their weaker social skills to meet new people. Results suggest that Internet usage allows them to fulfill critical needs of social interactions, self-disclosure, and identity exploration" (x). Teens with anxiety are at risk of developing FOMO with social media use (x). FOMO is associated with lower need satisfaction, mood and life satisfaction (x). Our internal research shows that teens (13-17) worldwide reported feeling less lonely than most other age groups, especially young adults (18-24), and were more likely to say Facebook helped them feel less lonely. Teens also rated their interactions on FB as more meaningful than any other age group (x). External research has found that when Instagram is increasing closeness between friends, it is related to lower levels of anxiety/depression (x). The number of social media platforms used could be positively correlated to teens' feelings of FOMO (x). A similar linear relationship is shown for young adults (x). A possible explanation for this relationship is that each platform comes with their own set of social rules and etiquettes that users have to learn: "an individual who uses only one or two platforms may easily learn these idiosyncrasies and succeed at leveraging that platform for positive social capital and positive interaction. However, as the number of platforms used increases, individuals may experience difficulty navigating these multiple different worlds successfully, leading to potentially negative mood and emotions. Moreover, a third possible reason for use of multiple platforms leading to depressive or anxiety symptoms may involve an increased risk of damaging gaffes." (x).

Summaries of selected external research

- Baker, D. A., & Algorta, G. P. (2016). The relationship between online social networking and depression: a systematic review of quantitative studies. This systematic review of empirical studies (n = 30) adds to existing research in this field by examining current quantitative studies focused on the relationship between online social networking and symptoms of depression. The findings suggest that the relationship between online social networking and symptoms of depression may be complex and associated with multiple psychological, social, behavioral, and individual factors. Furthermore, the impact of online social networking on wellbeing may be both positive and negative, highlighting the need for future research to determine the impact of candidate mediators and moderators underlying these heterogeneous outcomes across evolving networks
- Barry, C, Sidoti, C, Briggs S, Reiter, SR & Lindsey, RA (2017). Adolescent social media use and mental health from adolescent and parent perspectives. Parent and adolescent reports of the number of adolescents' social media accounts were moderately correlated with parent-reported DSM-5 symptoms of inattention, hyperactivity/impulsivity, ODD, anxiety, and depressive symptoms, as well as adolescent-reported fear of missing out (FoMO) and loneliness. Lastly, anxiety and depressive symptoms were highest among adolescents with a relatively high number of parent-reported social media accounts and relatively high FoMO.
- Bonetti, L., Campbell, M. A., & Gilmore, L. (2010). The relationship of loneliness and social anxiety with children's and adolescents' online communication. The aim of this study was to investigate differences in usage of online communication patterns between children and adolescents with and without self-reported loneliness and social anxiety. 626 students ages 10 to 16 years completed a survey on the amount of time they spent communicating online, the topics they discussed, the partners they engaged with, and their purposes for communicating over the Internet. Findings revealed that children and adolescents who self-reported being lonely communicated online significantly more frequently about personal and intimate topics than did those who did not self-report being lonely. The former were motivated to use online communication significantly more frequently to compensate for their weaker social skills to meet new people. Results suggest that Internet usage allows them to fulfill critical needs of social interactions, self-disclosure, and identity exploration.
- Coyne, S. M., Padilla-Walker, L. M., Day, R. D., Harper, J., & Stockdale, L. (2014). A friend request from dear old dad: Associations between parent- child social networking and adolescent outcomes. This study examined the relationship between parent- child social networking, connection, and outcomes for adolescents. Social networking with parents was associated with increased connection between parents and adolescents. Feelings of connection then mediated the relationship between social networking with parents and behavioral outcomes, including higher prosocial behavior and lower relational aggression and internalizing behavior. Conversely, adolescent social networking use without parents was associated with negative outcomes, such as increased relational aggression, internalizing behaviors, delinquency, and decreased feelings of connection. These results indicate that although high levels of social networking use may be problematic for some individuals, social networking with parents may potentially strengthen parent- child relationships and then lead to positive outcomes for adolescents.
- Daly, M. (2018). Social media use may explain little of the recent rise in depressive symptoms among adolescent girls.
- Glover, J., & Fritsch, S. L. (2018). # KidsAnxiety and Social Media: A Review. There is limited research guiding clinician's understanding of child or adolescent anxiety and the negative and positive impact social media may have for youth with anxiety. Socially anxious youth may find a social media presence helpful in developing relationships. Problematic Internet use in children and adolescents has significant impact on sleep, anxiety, and depression.
- Jensen, M., George, M., Russell, M. & Odgers, C. (in press). Young Adolescents' Digital Technology Use and Adolescents' Mental Health Symptoms: Little Evidence of Longitudinal or Daily Linkages. This study examines whether adolescents' digital technology use is associated with mental health symptoms (N=388) during early to mid-adolescence. Adolescents completed an initial Time 1 (T1) assessment in 2015, followed by a 14-day ecological momentary assessment (EMA) via mobile phone in 2016-2017 which yielded 13,017 total observations over 5270 study days. Adolescents' T1 technology use did not predict later mental health symptoms. Adolescents' reported mental health was also not worse on days when they reported spending more versus less time on technology. Little was found to support daily quadratic associations (whereby adolescent mental health was worse on days with little or excessive use). Adolescents at higher risk for mental health problems also exhibited no signs of increased risk for mental health problems on higher technology use days. Findings from this EMA study do not support the narrative that young adolescents' digital technology usage is associated with elevated mental health symptoms.

- Kardefelt-Winther, D. (2017). How does the time children spend using digital technology impact their mental well-being, social relationships and physical activity? An evidence-focused literature review. Based on an evidence-focused literature review, the first part of this paper examines existing knowledge on how the time children spend using digital technology impacts their well-being across three dimensions; mental/psychological, social and physical. The evidence reviewed here is largely inconclusive with respect to impact on children's physical activity, but indicates that digital technology seems to be beneficial for children's social relationships. In terms of impact on children's mental well-being, the most robust studies suggest that the relationship is U-shaped, where no use and excessive use can have a small negative impact on mental well-being, while moderate use can have a small positive impact. In the second part of the paper, the hypothetical idea of addiction to technology is introduced and scrutinized. This is followed by an overview of the hypothetical idea that digital technology might re-wire or hijack children's brains; an assumption that is challenged by recent neuroscience evidence. In conclusion, considerable methodological limitations exist across the spectrum of research on the impact of digital technology on child well-being, including the majority of the studies on time use reviewed here, and those studies concerned with clinical or brain impacts. This prompts reconsideration of how research in this area is conducted.
- Lee, S. J. (2009). Online communication and adolescent social ties: Who benefits more from Internet use?.
- Livingstone, S. (2018). Review: iGen: why today's super-connected kids are growing up less rebellious, more tolerant, less happy- and completely unprepared for adulthood. There is a host of alternative explanations for the observed trends - for instance, concerning pressures on the education system, growing social inequality, racial and ethnic tensions, labour market instability, growing precarity, student debt, drugs policy, political disaffection, the undermining of health and welfare provision and more. The liveliest debate over the reception of the book centres on whether this is due to use of the smartphone or, perhaps, the cumulative effect of many adverse factors shaping children's lives, or, even, a greater openness to reporting mental health difficulties (and so, ultimately, a good thing, leading more to seek support rather than suffering in silence).
- McDool, E., Powell, P., Roberts, J., & Taylor, K. (2016). Social media use and children's wellbeing. Spending more time on social networks reduces the satisfaction that children feel with all aspects of their lives, except for their friendships; and that girls suffer more adverse effects than boys.
- Oberst, U., Wegmann, E., Stodt, B., Brand, M., & Chamarro, A. (2017). Negative consequences from heavy social networking in adolescents: the mediating role of fear of missing out. We analyze the role of fear of missing out (FOMO) and intensity of SNS use for explaining the link between psychopathological symptoms and negative consequences of SNS use. It was found that both FOMO and SNI mediate the link between psychopathology and CERM, but by different mechanisms. Additionally, for girls, feeling depressed seems to trigger higher SNS involvement. For boys, anxiety triggers higher SNS involvement.
- Odgers, C. L. (2018). Smartphones are bad for some adolescents, not all. Studies so far do not support fears that digital devices are driving the downfall of a generation. What online activities might be doing, however, is reflecting and even worsening existing vulnerabilities.
- Orben, A., Dienlin, T. & Przybylski, A. (2019). Social media's enduring effect on adolescent life satisfaction. A longitudinal study in the UK, using the Understanding Society panel of n=12,000 adolescents. Social media is not a predictor of life satisfaction among teens.
- Orben, A. & Przybylski, A. (2019). The association between adolescent well-being and digital technology use. The association between digital technology use and adolescent well-being is negative but small, explaining at most 0.4% of the variation in well-being. Taking the broader context of the data into account suggests that these effects are too small to warrant policy change.
- Orben, A. & Przybylski, A. (2019). Screens, Teens, and Psychological Well-Being: Evidence From Three Time-Use-Diary Studies. The notion that digital-screen engagement decreases adolescent well-being has become a recurring feature in public, political, and scientific conversation. The current level of psychological evidence, however, is far removed from the certainty voiced by many commentators. There is little clear-cut evidence that screen time decreases adolescent well-being, and most psychological results are based on single-country, exploratory studies that rely on inaccurate but popular self-report measures of digital-screen engagement. In this study, which encompassed three nationally representative large-scale data sets from Ireland, the United States, and the United Kingdom (N = 17,247 after data exclusions) and included time-use-diary measures of digital-screen engagement, we used both exploratory and confirmatory study designs to introduce methodological and analytical improvements to a growing psychological research area. We found little evidence for substantial negative associations between digital-screen engagement– measured throughout the day or particularly before bedtime– and adolescent well-being.
- Primack, BA., Shensa, A., Escobar-Viera, CG., Barrett, EL., Sidani, E., Colditz, JB., James, E. (2017). Use of multiple social media platforms and symptoms of depression and anxiety: A nationally-representative study among U.S. young adults. Linear association between the number of platforms used and depression and between the number of platforms used and anxiety. Associations remained strong after controlling for total time of social media use.

- Przybylski, A. K., & Weinstein, N. (2017). A large-scale test of the goldilocks hypothesis: quantifying the relations between digital-screen use and the mental well-being of adolescents. Although the time adolescents spend with digital technologies has sparked widespread concerns that their use might be negatively associated with mental well-being, these potential deleterious influences have not been rigorously studied. Using a preregistered plan for analyzing data collected from a representative sample of English adolescents (n = 120,115), we obtained evidence that the links between digital-screen time and mental well-being are described by quadratic functions. Further, our results showed that these links vary as a function of when digital technologies are used (i.e., weekday vs. weekend), suggesting that a full understanding of the impact of these recreational activities will require examining their functionality among other daily pursuits. Overall, the evidence indicated that moderate use of digital technology is not intrinsically harmful and may be advantageous in a connected world. The findings inform recommendations for limiting adolescents' technology use and provide a template for conducting rigorous investigations into the relations between digital technology and children's and adolescents' health.
- Radovic, A., Gmelin, T., Stein, BD., Miller E. (2017). Depressed adolescents' positive and negative use of social media. Adolescents with depression described both positive and negative use of social media. Positive use included searching for positive content (i.e. for entertainment, humor, content creation) or for social connection. Negative use included sharing risky behaviors, cyberbullying and for making self-denigrating comparisons with others.
- Rideout, V. & Fox, S. (2018). Digital Health Practices, Social Media Use, and Mental Well-Being Among Teens and Young Adults in the U.S. There is no correlation between reported frequency of social media use and reported depressive symptoms among teens and young adults. This survey does not find a statistically significant association between depressive symptoms and how teens report using social media (i.e. "active" or "passive" behaviors on social media). Teens with depressive symptoms have HEIGHTENED experiences on social media, both more positive AND more negative. 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. Teens and young adults with 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%). 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.
- Sampasa-Kanyinga, H., & Lewis, R. F. (2015). Frequent use of social networking sites is associated with poor psychological functioning among children and adolescents. This study investigated the association between time spent on SNSs and unmet need for mental health support, poor self-rated mental health, and reports of psychological distress and suicidal ideation in a representative sample of middle and high school children in Ottawa, Canada. Students who reported unmet need for mental health support were more likely to report using SNSs for more than 2 hours every day than those with no identified unmet need for mental health support. Daily SNS use of more than 2 hours was also independently associated with poor self-rating of mental health and experiences of high levels of psychological distress and suicidal ideation. The findings suggest that students with poor mental health may be greater users of SNSs. These results indicate an opportunity to enhance the presence of health service providers on SNSs in order to provide support to youth.
- Seabrook, E. M., Kern, M. L., & Rickard, N. S. (2016). Social networking sites, depression, and anxiety: a systematic review. The systematic review revealed many mixed findings between depression, anxiety, and SNS use. Positive interactions, social support, and social connectedness on SNSs were consistently related to lower levels of depression and anxiety, whereas negative interaction and social comparisons on SNSs were related to higher levels of depression and anxiety. SNS use related to less loneliness and greater self-esteem and life satisfaction. Findings were mixed for frequency of SNS use and number of SNS friends. Different patterns in the way individuals with depression and individuals with social anxiety engage with SNSs are beginning to emerge.
- Twenge, JM, Krizan, Z, & Hisler, G (2017). Decreases in self-reported sleep duration among US adolescents 2009- 2015 and association with new media screen time. Increased new media screen time may be involved in the recent increases (from 35% to 41% and from 37% to 43%) in short sleep among adolescents.
- Vannucci, A., Flannery, K. M., & Ohannessian, C. M. (2017). Social media use and anxiety in emerging adults. More time spent using social media was significantly associated with greater symptoms of dispositional anxiety (B=0.74, 95% CI=0.59- 0.90, p<0.001), but was unrelated to recent anxiety-related impairment (B=0.06, 95% CI=0.00- 0.12, p=0.051), controlling for age, gender, race/ethnicity, and education level.
- Weinstein, E. (2018). The social media see-saw: Positive and negative influences on adolescents' affective well-being. Survey self-reports (n = 568) portray social media use as predominantly positive. In-depth qualitative work shows that experiences can be organized across four functional dimensions. Relational interactions contribute to both closeness and disconnection; self-expression facilitates affirmation alongside concern about others' judgments; interest-driven exploration confers inspiration and distress; and browsing leads to entertainment and boredom, as well as admiration and envy. All interviewees describe positive and negative affect experiences across multiple dimensions. Analyses suggest the relationship between social technology usage and well-being—whether enhanced or degraded— is not confined to an "either/or" framework: the emotional see-saw of social media use is weighted by both positive and negative influences.

- Woods, HC & Scott, H (2016). # Sleepyteens: Social media use in adolescence is associated with poor sleep quality, anxiety, depression and low self-esteem. Relationship between social media and sleep quality: that poor sleep quality was most strongly associated with nighttime-specific social media use, while anxiety, depression and self-esteem were most strongly associated with emotional investment in social media. Only anxiety and depression significantly predict poorer sleep quality. Nighttime-specific social media use significantly predicted poorer sleep, whereas overall use did not. This suggests that social media behaviours around bedtime are more important in explaining the link between social media use and poor sleep than general behaviours throughout the day.

Summaries of selected internal research

INSTAGRAM RESEARCH & YOUTH WELL-BEING

Overall for teens, our internal research has not found a relationship between well-being on Instagram (IG) (how they felt while using Instagram) and TS on Instagram, although IG teens scored worse than IG adults on general well-being, negative affect (US, UK, BR), loneliness (US, UK, BR), and depression (only in US) (x).

- SSI: People are building healthy support communities for SSI on IG. While some people want to help, they may: 1) not know how to help, and/or 2) lack the tools and resources they need to be effective supporters. We're focused on developing a deeper understanding of the people who are going through SSI, those who want to help them, and viewers who may be negatively impacted by SSI content. Understanding these groups will enable us to create products that truly speak to their needs.
- Social Conflict: Teens weaponize IG features to torment each other, often without violating standards.
- Social Comparison (1, 2): 51% of people experience social comparison on IG (e.g., they compare their accomplishments to others or observe other people to decide how they should act "sometimes" or more often.). Women and teens are more prone to social comparison, especially negative social comparison.
- Connections: We need more research to understand people's anxiety about which friends they are not connected to (or are not engaging with) on IG / social media.
- Time Spent: Teens and younger adults have more interest in receiving help to manage their time on Instagram than adults.

FACEBOOK RESEARCH & YOUTH Well-Being

- Well-being Levers for Teens on Social Media: Mixed method study shows that close relationships, self-worth and meanings in life, and feeling positive are the most important well-being dimensions for teens. Social media activities that involve direct interactions with others have the largest effect on well-being. [2018]
- How do Teens talk about Well-being and Social Media?: This qualitative research project explored how teens talk about positive and negative effects of their social media use. Teen participants thought the narratives around social media and well-being are driven mainly by adults and may not fully reflect the experience of teens. [2018]
- Facebook can help alleviate feelings of loneliness. Teens (13-17) worldwide reported feeling less lonely than most other age groups, especially young adults (18-24), and were more likely to say Facebook helped them feel less lonely. Teens also rated their interactions on FB as more meaningful than any other age group.
- Messenger Kids Sentiment Survey: Both parents and kids view MK positively. On a scale of 1 to 5 (1 being most negative, 5 being most positive), parent reported feeling very close (4.12) to their kids when interacting on MK, viewed their time spent on MK as very meaningful (4.28), felt happy (4.53) when on MK, had a lot of fun on MK (4.25), and are satisfied with their kids' MK experience (4.62). [2018]
- [PUBLISHED EXTERNALLY] Everything's the Phone: Understanding the phone's supercharged role in parent-teen relationships: This mixed-method research project presents a conceptual model showing how parents' and teens' relationships to their phones and perceptions of each other's phone use are inextricably linked and how, together, they contribute to parent-teen tensions. We use the model to consider how the phone might play a less highly charged role in family life and contribute to positive connections between parents and their teen children. [2018] [peer-reviewed collaboration with University of Washington and accepted for CHI 2019 conference]
- [TO BE PUBLISHED EXTERNALLY] Development of a survey instrument to assess teens' social media interactions and their effect on well-being. There are currently no validated scales to measure social media interactions. Together with the University of Wisconsin, we developed a survey instrument to assess specific technology interactions. This tool will have significant contribution to the field of research for technology and youth (and go beyond the current platform-specific model). The survey instrument has been developed and will be submitted to a journal soon. There is a potential showcase for ABC segment, Comms is involved. (University of Wisconsin collaboration)

- [TO BE PUBLISHED EXTERNALLY] Relationship between social media use and health/wellbeing of youth: This large-scale survey will be the first of its kind to assess a combination of variables, beyond the cross-sectional design and to use a parent-child dyadic approach to understand how social media affects well-being in youth. (University of Wisconsin collaboration)
- [TO BE PUBLISHED EXTERNALLY] Assess short and long-term effects on social media use, health and well-being among teens. A pilot intervention will compare the American Academy of Pediatrics' Family Media Use plan compared to an awareness raising effort to determine which approach has positive effects on youth and parent social media experiences. (University of Wisconsin collaboration)
- [TO BE PUBLISHED EXTERNALLY] Evaluate real-time associations between technology use and mood among teens. An Ecological momentary assessment (EMA) study will help us understand teens' technology use and mood changes in teens. (University of Wisconsin collaboration)
- [TO BE PUBLISHED EXTERNALLY] Digital device use and family life: A 2x2 experimental design with parents and their children finds that there is no difference between using devices and not using devices in families' ratings of the meaningfulness of interactions provided families interact TOGETHER.

Contact Support

Conversation History

Anja Dinhopl renamed TEEN WELL-BEING AND SOCIAL MEDIA: OVERVIEW BRIEFING to TEEN WELL-BEING AND SOCIAL MEDIA: OVERVIEW BRIEFING May 12, 2019 at 4:06 pm

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Anja Dinhopl edited May 12, 2019 at 3:58 pm
However, some aspects of teen well-being (life satisfaction, loneliness, depression, anxiety) have recently seen a reversal of long-term positive trends and warrant further attention. According to the most robust research studies to date, these downturns are not caused by social media or digital technologies (x, x). For example, a re-analysis of Twenge's data on depressive symptoms and teens concludes that social media accounts for little of the rise in... showed her claims to be unsubstantiated (finding that the cited research studied adults and found completely different results than she had claimed) (x).
Yet, to date there are few representative studies on youth well-being and social media, and none that explicitly compare youth to adult well-being... potatoes has the same negative effect as social media on adolescent well-being (x). Additional research from 3 countries comparing time-use diaries suggests that there is little evidence for substantial negative associations between digital-screen engagement– measured throughout the day or particularly before bedtime– and adolescent well-being (x). The evidence indicates... teens are more adept than adults at integrating digital technologies into their everyday lives and use social media to enhance their friendships (x).

- Jensen, M., George, M., Russell, M. & Odgers, C. (in press). Young Adolescents' Digital Technology Use and Adolescents' Mental Health Symptoms: Little Evidence of Longitudinal or Daily Linkages. This study examines whether adolescents' digital technology use is associated with mental health symptoms (N=388) during early to mid-adolescence. Adolescents completed an initial Time 1 (T1) assessment in 2015, followed by a 14-day ecological momentary assessment (EMA) via mobile phone in 2016-2017 which yielded 13,017 total observations over 5270 study days. Adolescents' T1 technology use did not predict later mental health symptoms. Adolescents' reported mental health was also not worse on days when they reported spending more versus less time on technology. Little was found to support daily quadratic associations (whereby adolescent mental health was worse on days with little or excessive use). Adolescents at higher risk for mental health problems also exhibited no signs of increased risk for mental health problems on higher technology use days. Findings from this EMA study do not support the narrative that young adolescents' digital technology usage is associated with elevated mental health symptoms.

- Orben, A., Dienlin, T. & Przybylski, A. (2019). Social media's enduring effect on adolescent life satisfaction. A longitudinal study in the UK, using the Understanding Society panel of n=12,000 adolescents. Social media is not a predictor of life satisfaction among teens.

Jennifer Guadagno opened your conversation with Anneke Buffone, David Ginsberg, Pete Fleming, Crystine Gray, Anja Dinhopl, Antigone Davis and Elena Davis May 11, 2019 at 12:34 am

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Anja Dinhopl edited May 11, 2019 at 12:01 am
Research on teen mental health problems suggests that recent increases may be due to heightened awareness of depression and that the condition had been long... suggests that there is little evidence for substantial negative associations between digital-screen engagement– measured throughout the day or particularly before bedtime– and adolescent well-being (x). More recently, longitudinal research has found that young adolescents' digital technology usage is not associated with elevated mental health symptoms (x).

- [TO PUBLISHED [PUBLISHED EXTERNALLY] Everything's the Phone: Understanding the phone's supercharged role in parent-teen relationships: This mixed-method research project presents a conceptual model showing how parents'... and contribute to positive connections between parents and their teen children. [2018] [peer-reviewed collaboration with University of Washington and accepted for CHI 2019 conference]

Crystine Gray opened your conversation with Anneke Buffone, David Ginsberg, Pete Fleming, Jennifer Guadagno, Anja Dinhopl, Antigone Davis and Elena Davis Apr 17, 2019 at 7:04 pm

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David Ginsberg added Crystine Gray to the thread Apr 17, 2019 at 6:36 pm

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David Ginsberg added you to a document Apr 17, 2019 at 6:29 pm

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Anja Dinhopl edited Apr 11, 2019 at 10:23 pm
The concerns around teen well-being and social media are only new on the surface. Parents have always worried about teenagers and how they spend... in teen mental health problems creates a perfect storm. However, there is strong reason to believe these incidents are not related to one another. Rather, research has found that there is heightened awareness of depression and that the condition had been long under-diagnosed in previous decades (x). Similarly, overall increases in anxiety disorders may be due to the inclusion of mild forms of anxiety as clinically diagnosed disorders (x). :

Research on teen mental health problems suggests that recent increases may be due to heightened awareness of depression and that the condition had been long under-diagnosed in previous decades (x) and the overall increases in anxiety disorders may be due to the inclusion of mild forms of anxiety as clinically diagnosed disorders (x). Research on teen well-being and digital technology use suggests that the association between digital technology use and adolescent well-being may be negative but small, explaining at most 0.4% of the variation in well-being and does not warrant policy changes (x). Large scale research suggests that there is little evidence for substantial negative associations between digital-screen engagement– measured throughout the day or particularly before bedtime– and adolescent well-being (x).

Instead of fear-based research and reporting, experts call for (a) taking cultural and social factors into account for population-level analysis for a holistic perspective (x) and , (b) taking an individual approach and understanding that not everyone is affected the same. For example, teens who are vulnerable 'offline' are more... 'online' – e.g. teens from lower SES backgrounds are at greater risk for negative consequences of their time spent online (x), and (c) using robust methodologies and study designs to measure teen well-being (x).
Yet, to date there are few representative studies on youth well-being and social media, and none that explicitly compare youth to adult well-being... (x). To illustrate the small effect size, one author states that eating potatoes has the same negative effect as social media on adolescent well-being (x). Additional research from 3 countries comparing time-use diaries suggests that little evidence for substantial negative associations between digital-screen engagement– measured throughout the day or particularly before bedtime– and adolescent well-being (x). The evidence indicates that moderate use of digital technology is not intrinsically harmful and may be advantageous (x... teens are more adept than adults at integrating digital technologies into their everyday lives and use social media to enhance their friendships (x).

- Orben, A. & Przybylski, A. (2019). Screens, Teens, and Psychological Well-Being: Evidence From Three Time-Use-Diary Studies. The notion that digital-screen engagement decreases adolescent well-being has become a recurring feature in public, political, and scientific conversation. The current level of psychological evidence, however, is far removed from the certainty voiced by many commentators. There is little clear-cut evidence that screen time decreases adolescent well-being, and most psychological results are based on single-country, exploratory studies that rely on inaccurate but popular self-report measures of digital-screen engagement. In this study, which encompassed three nationally representative large-scale data sets from Ireland, the United States, and the United Kingdom (N = 17,247 after data exclusions) and included time-use-diary measures of digital-screen engagement, we used both exploratory and confirmatory study designs to introduce methodological and analytical improvements to a growing psychological research area. We found little evidence for substantial negative associations between digital-screen engagement– measured throughout the day or particularly before bedtime– and adolescent well-being.

Anneke Buffone opened your conversation with David Ginsberg, Pete Fleming, Crystine Gray, Jennifer Guadagno, Anja Dinhopl, Antigone Davis and Elena Davis Apr 11, 2019 at 10:07 pm

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Anja Dinhopl added Anneke Buffone, Elena Davis and Jennifer Guadagno to the thread Apr 11, 2019 at 8:59 pm

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Anja Dinhopl added you to a document Apr 11, 2019 at 8:51 pm

Anja Dinhopl added you to a document Apr 11, 2019 at 8:51 pm

Anja Dinhopl added you to a document Apr 11, 2019 at 8:51 pm

Tim Colbourne opened your conversation with Anneke Buffone, David Ginsberg, Pete Fleming, Crystine Gray, Jennifer Guadagno, Anja Dinhopl, Antigone Davis and Elena Davis Mar 10, 2019 at 3:50 am

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Antigone Davis opened your conversation with Anneke Buffone, David Ginsberg, Pete Fleming, Crystine Gray, Jennifer Guadagno, Anja Dinhopl and Elena Davis Mar 1, 2019 at 4:33 pm

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Anja Dinhopl added Antigone Davis to the thread Feb 25, 2019 at 9:24 pm

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Anja Dinhopl added you to a document Feb 25, 2019 at 9:17 pm

Anja Dinhopl enabled link sharing · View Feb 21, 2019 at 11:10 pm

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Anja Dinhopl enabled link sharing · View/Edit Feb 19, 2019 at 4:08 pm

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Anja Dinhopl edited Feb 19, 2019 at 3:53 pm
However, some aspects of teen well-being (life satisfaction, loneliness, depression, anxiety) have recently seen a reversal of long-term positive trends and... effects of the Great Recession)" (x). Further, a re-examination of Twenge's claims of social media causing anxiety among teens showed her claims to be unsubstantiated (finding that the cited research studied adults and found completely different results than she had claimed) (x).

- Barry, C, Sidoti, C, Briggs S, Reiter, SR & Lindsey, RA (2017). Adolescent social media use...
- . A., & Gilmore, L. (2010). The relationship of loneliness and social anxiety with children's and adolescents' online communication. Children and adolescents now communicate online to form and/or maintain relationships with friends, family, and strangers. Relationships in "real life" are important for children's and adolescents' psychosocial development; however, they can be difficult for those who experience feelings of loneliness and/or social anxiety. The aim of this study was to investigate differences in usage of online communication patterns between children and adolescents with and without self-reported loneliness and social anxiety. Six hundred twenty-six 626 students ages 10 to 16 years completed a survey on the amount of time they spent communicating online, the topics they discussed, the partners they engaged with, and their purposes for communicating over the Internet. Participants were administered a shortened version of the UCLA Loneliness Scale and an abbreviated subscale of the Social Anxiety Scale for Adolescents (SAS-A). Additionally, age and gender differences in usage of the online communication patterns were examined across the entire sample. Findings revealed that children and adolescents who self-reported being lonely communicated online significantly more frequently about personal and intimate topics than did those who... meet new people. Results suggest that Internet usage allows them to fulfill critical needs of social interactions, self-disclosure, and identity exploration.

on adolescents' social media experiences.

- [TO BE PUBLISHED EXTERNALLY] Development of a survey instrument to assess teens' social media interactions and their effect on well-being. There are currently no... . This tool will have significant contribution to the field of research for technology and youth (and go beyond the current platform-specific model). The survey instrument has been developed and will be submitted to a journal soon. There is a potential showcase for ABC segment, Comms is involved. (University of Wisconsin collaboration)

David Ginsberg edited Feb 19, 2019 at 6:17 am

KEY TAKE-AWAYS TEEN WELL-BEING AND SOCIAL MEDIA: OVERVIEW BRIEFING

[POTENTIAL FRAMING]The concerns around teen well-being and social media are only new on the surface. Parents have always worried about teenagers and how they spend their time. The , especially around the introduction of new information technologies has always . These new technologies have often been accompanied by panics, such as books being called "confusing and harmful" as early as the 16th century (x). Put Given the two together speed of mass adoption of the smartphone, and there is logically a fear around teens' use of smartphones these devices, and of social media. Adding in the recent increases in teen mental health problems together creates a perfect storm. But However, there is strong reason to believe these incidents are not related to one another at all. Rather, research has found that there is heightened awareness of depression and that the condition had been long underdiagnosed under-diagnosed in previous decades (x). Similarly, overall increases in anxiety disorders may be due to the inclusion of mild forms of anxiety as clinically diagnosed disorders (x).

That said, there is still a significant and important debate about the role of technology in general and social media specifically on teens. The memo below outlines what is known from academic literature (first section) as well as what we have learned from our internal research (second section).
However, some aspects of teen well-being (life satisfaction, loneliness, depression, anxiety) have recently seen a reversal of long-term positive trends and...). Further, a re-examination of Twenge's claims of social media causing anxiety among teens showed her claims be unsubstantiated (finding that the cited research that studied adults and found completely different results than she had claimed) (x).

David Ginsberg renamed KEY TAKE-AWAYS to TEEN WELL-BEING AND SOCIAL MEDIA: OVERVIEW BRIEFING Feb 19, 2019 at 6:12 am

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Anja Dinhopl Feb 19, 2019 at 3:41 am

Added

Anja Dinhopl edited Feb 19, 2019 at 4:11 am

[POTENTIAL FRAMING] The concerns around teen well-being and social media are only new on the surface. Parents have always worried about teenagers and how they spend their time. The introduction of new information technologies has always been accompanied by panics, such as books being called "confusing and harmful" as early as the 16th century (x). Put the two together, and there is logically fear around teens' use of smartphones. Adding recent increases in teen mental health problems together creates a perfect storm. But, there is strong reason to believe these incidents are not related to one another at all. Rather, research has found that there is heightened awareness of depression and that the condition had been long underdiagnosed in previous decades (x). Similarly, overall increases in anxiety disorders may be due to the inclusion of mild forms of anxiety as clinically diagnosed disorders (x).

In recent years, there has been criticism around social media's negative impact on teen well-being. One of the most prominent critics in this area is Jean Twenge, who received popular attention for her book "iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy– and Completely Unprepared for Adulthood– and What That Means for the Rest of Us" as well as her The Atlantic article "Have Smartphones destroyed a generation?" Twenge claims that increases in depression and youth suicide, lower academic achievement and political engagement, antisocial behavior and increased loneliness are the result of teens using smartphones and social media. Her arguments have been debunked both in the popular press (x, x, x) and in academia (x, x) for presenting a simplistic narrative for a complex phenomenon, presenting correlation as causation, cherry-picking confirmatory evidence for her claims, and misleadingly presenting trends. For a full rebuttal of Twenge's claims, please see here. Many of the long-term trends observed are linked to socio-cultural shifts in the US over the past 40 years, such as "pressures on the education system, growing social inequality, racial and ethnic tensions, labour market instability, growing precarity, student debt, drugs policy, political disaffection, the undermining of health and welfare provision" (x).

However, some aspects of teen well-being (life satisfaction, loneliness, depression, anxiety) have recently seen a reversal of long-term positive trends and warrant further attention. According to the most robust research studies to date, these downturns are not caused by social media or digital technologies. For example, a re-analysis of Twenge's data on depressive symptoms and teens concludes that social media accounts for little of the rise in depressive symptoms and that "the findings point to a need for alternative explanations (e.g. increased academic strain, prolonged effects of the Great Recession)" (x). Further, a re-examination of Twenge's claims of social media causing anxiety among teens showed her claims be unsubstantiated (finding that the cited research that studied adults and found completely different results than she had claimed) (x).

Instead of fear-based research and reporting, experts call for (a) taking cultural and social factors into account for population-level analysis for a holistic perspective (x) and (b) taking an individual approach and understanding that not everyone is affected the same. For example, teens who are vulnerable 'offline' are more vulnerable 'online' – e.g. teens from lower SES backgrounds are at greater risk for negative consequences of their time spent online (x).

There Yet, to date there are few representative studies on youth well-being and social media, and none that explicitly compare youth to adult well-being as it relates to social... research show mixed findings (positive / negative / non-significant) about the association between depression and anxiety and social media use (x, x). Experts call for holistic, evidence-based research taking into account cultural and social factors instead of blaming social media or Another meta-review of 36 studies shows that teens are more adept than adults at integrating digital technologies for recent downturns in youth well-being (x). into their everyday lives and use social media to enhance their friendships (x).

The idea that (social) media use for younger children in particular is harmful is not supported by scientific evidence. Digital technology use is considered beneficial to children's social relationships (x) and social media use in particular seems to be linked to better cognitive development, refuting earlier assumption that brain development in children is negatively impacted by social media (x,x). For children, "the most robust studies suggest that the relationship is U-shaped, where no use and excessive use can have a small negative impact on mental well-being, while moderate use can have a small positive impact" (x).

Digital technology use is considered beneficial to children's social relationships (x) and social media use in particular seems to be linked to better cognitive development, refuting earlier assumption that brain development in children is negatively impacted by social media (x,x). For children, "the most robust studies suggest that the relationship is U-shaped, where no use and excessive use can have a small negative impact on mental well-being, while moderate use can have a small positive impact" (x).

While these large scale population studies and meta-reviews appear to show a small impact In summary, many other studies show divergent results the body of social media's impact on youth well-being, suggesting research suggests that (a) the relationship between teens' social media use and their well-being does not fit an "either/or" framework and (b) that existing studies have for the most part not produced scientific consensus or clarity around social media use and teen well-being (studies have not been able to establish directionality or causality of teens' social media use and their well-being). Social media experiences can be positive or negative depending on the individual: Social media experiences can be organized across 4 dimensions that can... ; interest-driven exploration confers inspiration and distress; and browsing leads to entertainment and boredom, as well as admiration and envy" (x).

ANXIETY. The directionality of the relationship between anxiety and social media use is unclear. Teens who report higher emotional investment in social media... more likely to say Facebook helped them feel less lonely. Teens also rated their interactions on FB as more meaningful than any other age group (x). External research has found that when Instagram is increasing closeness between friends, it is related to lower levels of anxiety/depression (x). The number of social media platforms used could be positively correlated to teens' feelings of FOMO (x). A... reason for use of multiple platforms leading to depressive or anxiety symptoms may involve an increased risk of damaging gaffes." (x).

- Daly, M. (2018). Social media use may explain little of the recent rise in depressive symptoms among adolescent girls.
- Lee, S. J. (2009). Online communication and adolescent social ties: Who benefits more from Internet use?.
- Odgers, C. L. (2018). Smartphones are bad for some adolescents, not all. Studies so far do not support fears that digital devices are driving the downfall of a generation. What online activities might be doing, however, is reflecting and even worsening existing vulnerabilities.

Pete Fleming Feb 18, 2019 at 6:12 pm

I haven't seen any studies that have compared IG users to gen pop on

loneliness/WB, but would love to learn if there are any studies that have

looked at this. I'd also be supportive of investing more in comparative studies

looking at on/off IG/FB vs. gen pop.

Pete Fleming Feb 18, 2019 at 6:07 pm

One external study found that using Instagram wasrelated to increased closeness to friends (perception that they are appreciatedand loved by their friends) six months later, which in turn was related tolower levels of depression. https://www.sciencedaily.com/releases...

Pete Fleming Feb 18, 2019 at 6:07 pm

An internal study found that teens on IG are more lonely than

adults in the US, UK, and Brazil. https://fb.workplace.com/photo...

Pete Fleming Feb 18, 2019 at 5:58 pm

One external study found that frequent use of Instagram at one point was related to greater depression six months later. However, using Instagram at one point was also related to increased closeness to friends (perception that they are appreciated and loved by their friends) six months later, which in turn was related to lower levels of depression. https://www.sciencedaily.com/releases...

Pete Fleming edited Feb 18, 2019 at 5:57 pm

David Ginsberg Feb 18, 2019 at 5:27 pm

I think here works

Anja Dinhopl edited Feb 18, 2019 at 4:59 pm
There are few representative studies on youth well-being and social media, and none that explicitly compare youth to adult well-being as it relates to... claims that the association between digital technology use and adolescent well-being is negative but small, explaining at most 0.4% of the variation in well-being and does not warrant policy changes (x). To illustrate the small effect size, one author states that eating potatoes has the same negative effect as social media on adolescent well-being (x). The evidence indicates that moderate use of digital technology is not intrinsically harmful and may be advantageous (x)... research taking into account cultural and social factors instead of blaming social media or digital technologies for recent downturns in youth well-being (x).
The idea that (social) media use for younger children in particular is harmful is not supported by scientific evidence. Digital technology use is considered beneficial to children's social relationships (x) and social media use in particular seems to be linked to... and excessive use can have a small negative impact on mental well-being, while moderate use can have a small positive impact" (x).
DEPRESSION. A recent nationally representative survey among US youth found that there is no correlation between reported frequency of social media use and reported... and providing a venue for creative self-expression. Adolescents with depressive symptoms report both positive and negative effects of social media use (x). Adaptive Positive practices include searching for positive content (i.e. for entertainment, humor, content creation) or for social connection. Maladaptive Negative practices include sharing risky behaviors, cyberbullying and for making self-denigrating comparisons with others.

Anja Dinhopl Feb 18, 2019 at 4:47 pm

Do you want me to add the paragraph here or in the mental health section?

Anja Dinhopl Feb 18, 2019 at 4:46 pm

Link to the article in popular press? Can do. The link right now goes to the academic article. The academic article also says that it's too small to warrant policy change.

David Ginsberg Feb 18, 2019 at 4:26 pm

Do we have research on this on IG? Anja Dinhopl Pete Fleming

David Ginsberg Feb 18, 2019 at 4:24 pm

can u use a bit more regular english here? Anja Dinhopl

David Ginsberg Feb 18, 2019 at 4:21 pm

Also, Anja Dinhopl, i think we need a full paragraph directly talking about iGen, twengy, et al. IE, Among the most prominent critics in this area is XXXX and XXXX, who claim X and Y. however, several academics since then have pointed out numerous conerns with their assertions, including x and y

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David Ginsberg Feb 18, 2019 at 4:19 pm

i'm struggling a bit with this first sentence. can you make it a bit simpler?

David Ginsberg Feb 18, 2019 at 4:18 pm

i think you need to add another word here - not supported by conclusive evidence? by rigorous evidenice?

David Ginsberg Feb 18, 2019 at 4:16 pm

Anja Dinhopl

David Ginsberg Feb 18, 2019 at 4:15 pm

anja - this is the potato finding, right? can we also link to the article about this piece, and perhaps note that the authors themselves note this is small, comparing the effect size to similar to if teens eat potatos or not.

David Ginsberg opened your conversation with Anneke Buffone, Pete Fleming, Crystine Gray, Jennifer Guadagno, Anja Dinhopl, Antigone Davis and Elena Davis Feb 18, 2019 at 4:15 pm

David Ginsberg edited Feb 18, 2019 at 4:25 pm

Pete Fleming opened your conversation with Anneke Buffone, David Ginsberg, Crystine Gray, Jennifer Guadagno, Anja Dinhopl, Antigone Davis and Elena Davis Feb 18, 2019 at 2:22 am

Pete Fleming edited Feb 18, 2019 at 2:42 am
Overall for teens there was no , our internal research has not found a relationship between well-being on Instagram (IG) (how they felt while using Instagram) and TS on Instagram, although IG teens within the IG community scored worse than IG adults on general well-being, negative affect (US, UK, BR), loneliness (US, UK, BR), and depression (only in US) (x).

- SSI: Depression related risk (negative) People are building healthy support communities for SSI on IG. While some people want to help, they may: 1) not know how to help, and/or 2) lack the tools and our opportunity to support resources they need to be effective supporters. We're focused on developing a deeper understanding of the people who are going through friends (positive) SSI, those who want to help them, and viewers who may be negatively impacted by SSI content. Understanding these groups will enable us to create products that truly speak to their needs.
- Social Conflict: Teens weaponize IG features to torment each other, often without violating standards.
- Social Comparison (1, 2): 51% of people experience social comparison on IG (e.g., they compare their accomplishments to others or observe other people to decide how they should act "sometimes" or more often.). Women and teens are more prone to social comparison, especially negative social comparison.
- Connections: Anxiety We need more research to understand people's anxiety about which friends you aren't they are not connected to (or are not engaging with) on IG / social media.
- Time Spent: Teens and younger Instagrammers adults have more interest in having receiving help managing to manage their time on Instagram than adult Instagrammers adults.

Anja Dinhopl renamed List of Youth Social Science Research:Completed Studies and Roadmap to KEY TAKE-AWAYS Feb 17, 2019 at 11:03 pm

Anja Dinhopl edited Feb 18, 2019 at 1:35 am

List of Youth Social Science Research: Completed Studies and Roadmap KEY TAKE-AWAYS

Social media and teen well-being

There are few representative studies on youth well-being and social media, and none that explicitly compare youth to adult well-being as it relates to social media (for a comprehensive literature review for adults' relationship between social media and well-being, see here). The largest scale research to date claims that the association between digital technology use and adolescent well-being is negative but small, explaining at most 0.4% of the variation in well-being (x). The evidence indicates that moderate use of digital technology is not intrinsically harmful and may be advantageous (x). In addition, meta-reviews of existing research show mixed findings (positive / negative / non-significant) about the association between depression and anxiety and social media use (x, x). Experts call for holistic, evidence-based research taking into account cultural and social factors instead of blaming social media or digital technologies for recent downturns in youth well-being (x).

The idea that (social) media use for younger children in particular is harmful is not supported. Digital technology use is considered beneficial to children's social relationships (x) and social media use in particular seems to be linked to better cognitive development, refuting earlier assumption that brain development in children is negatively impacted by social media (x,x). For children, "the most robust studies suggest that the relationship is U-shaped, where no use and excessive use can have a small negative impact on mental well-being, while moderate use can have a small positive impact" (x).

While these large scale population studies and meta-reviews appear to show a small impact, many other studies show divergent results of social media's impact on youth well-being, suggesting that (a) the relationship between teens' social media use and their well-being does not fit an "either/or" framework and (b) that existing studies have for the most part not produced scientific consensus or clarity around social media use and teen well-being (studies have not been able to establish directionality or causality of teens' social media use and their well-being). Social media experiences can be positive or negative depending on the individual: Social media experiences can be organized across 4 dimensions that can result in both positive and negative effects: "Relational interactions contribute to both closeness and disconnection; self-expression facilitates affirmation alongside concern about others' judgments; interest-driven exploration confers inspiration and distress; and browsing leads to entertainment and boredom, as well as admiration and envy" (x).

Social media and teen mental health

The most common arguments concerning the relationship between social media and teens' well-being revolve around teens becoming more anxious and more depressed because of their social media use. This directional relationship is unsupported by existing research. In fact, there is increasing evidence that the directionality goes the other way – teens with mental health problems turn to social media for help and improvement (x). That said, when social media use displaces sleep in adolescents (via nighttime social media use), it is negatively correlated to indicators of mental health (x).

DEPRESSION. A recent nationally representative survey among US youth found that there is no correlation between reported frequency of social media use and reported depressive symptoms among teens and young adults (x). This survey did not find statistically significant association between depressive symptoms and how teens report using social media (i.e. "active" or "passive" behaviors on social media). Teens with depressive symptoms have HEIGHTENED experiences on social media, both more positive AND more negative. Teens and young adults with 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%). 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. Adolescents with depressive symptoms report both positive and negative effects of social media use (x). Adaptive practices include searching for positive content (i.e. for entertainment, humor, content creation) or for social connection. Maladaptive practices include sharing risky behaviors, cyberbullying and for making self-denigrating comparisons with others.

ANXIETY. The directionality of the relationship between anxiety and social media use is unclear. Teens who report higher emotional investment in social media also display higher levels of anxiety (x). There is evidence to suggest that the relationship is such that more socially anxious teens tend to use social media more to communicate about personal and intimate topics. They "were motivated to use online communication significantly more frequently to compensate for their weaker social skills to meet new people. Results suggest that Internet usage allows them to fulfill critical needs of social interactions, self-disclosure, and identity exploration" (x). Teens with anxiety are at risk of developing FOMO with social media use (x). FOMO is associated with lower need satisfaction, mood and life satisfaction (x). Our internal research shows that teens (13-17) worldwide reported feeling less lonely than most other age groups, especially young adults (18-24), and were more likely to say Facebook helped them feel less lonely. Teens also rated their interactions on FB as more meaningful than any other age group (x). The number of social media platforms used could be positively correlated to teens' feelings of FOMO (x). A similar linear relationship is shown for young adults (x). A possible explanation for this relationship is that each platform comes with their own set of social rules and etiquettes that users have to learn: "an individual who uses only one or two platforms may easily learn these idiosyncrasies and succeed at leveraging that platform for positive social capital and positive interaction. However, as the number of platforms used increases, individuals may experience difficulty navigating these multiple different worlds successfully, leading to potentially negative mood and emotions. Moreover, a third possible reason for use of multiple platforms leading to depressive or anxiety symptoms may involve an increased risk of damaging gaffes." (x).

tl;dr

- DEPRESSION: There is no correlation between reported frequency of social media use and reported depressive symptoms among teens and young adults. This survey does not find a statistically significant association between depressive symptoms and how teens report using social media (i.e. "active" or "passive" behaviors on social media). Teens with depressive symptoms have HEIGHTENED experiences on social media, both more positive AND more negative. 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.

This is a semi-comprehensive list

Summaries o f

studies related to social science topics (per the definition in the main memo) that have been completed recently or are on the roadmap. Due to time constraints there are likely holes in this list we should continue to fill out.

selected external research

NOTE: STUDIES IN YELLOW INDICATE THEY ARE IN-PROGRESS OR ON THE ROADMAP FOR 2019

REVIEW OF SOCIAL SCIENCE LITERATURE

- [5]
- Baker, D. A., & Algorta, G. P. (2016). The relationship between online social networking and depression: a systematic review of quantitative studies. This systematic review of empirical studies (n = 30) adds to existing research in this field by examining current quantitative studies focused on the relationship between online social networking and symptoms of depression. The findings suggest that the relationship between online social networking and symptoms of depression may be complex and associated with multiple psychological, social, behavioral, and individual factors. Furthermore, the impact of online social networking on wellbeing may be both positive and negative, highlighting the need for future research to determine the impact of candidate mediators and moderators underlying these heterogeneous outcomes across evolving networks
- Barry, C, Sidoti, C, Briggs S, Reiter, SR & Lindsey, RA (2017). Adolescent social media use and mental health from adolescent and parent perspectives. Parent and adolescent reports of the number of adolescents' social media accounts were moderately correlated with parent-reported DSM-5 symptoms of inattention, hyperactivity/impulsivity, ODD, anxiety, and depressive symptoms, as well as adolescent-reported fear of missing out (FoMO) and loneliness. Lastly, anxiety and depressive symptoms were highest among adolescents with a relatively high number of parent-reported social media accounts and relatively high FoMO.
- Bonetti, L., Campbell,...
- M., Day, R. D., Harper, J., & Stockdale, L. (2014). A friend request from dear old dad: Associations between parent- child social networking and adolescent outcomes. This study examined the relationship between parent- child social networking, connection, and outcomes for adolescents. Social networking with parents was associated with increased connection between parents and adolescents. Feelings of connection then mediated the relationship between social networking with parents and behavioral outcomes, including higher prosocial behavior and lower relational aggression and internalizing behavior. Conversely, adolescent social networking use without parents was associated with negative outcomes, such as increased relational aggression, internalizing behaviors, delinquency, and decreased feelings of connection. These results indicate that although high levels of social networking use may be problematic for some individuals, social networking with parents may potentially strengthen parent- child relationships and then lead to positive outcomes for adolescents.
- Glover, J., & Fritsch, S. L. (2018). # KidsAnxiety and Social Media: A Review. There is limited research guiding clinician's understanding of child or adolescent anxiety and the negative and positive impact social media may have for youth with anxiety. Socially anxious youth may find a social media presence helpful in developing relationships. Problematic Internet use in children and adolescents has significant impact on sleep, anxiety, and depression.
- Kardefelt-Winther, D. (2017). How does the time children spend using digital technology impact their mental well-being, social relationships and physical activity? An evidence-focused literature review
- . UNICEF
- . Based on an evidence-focused literature review, the first part of this paper examines existing knowledge on how the time children spend using digital... reviewed here, and those studies concerned with clinical or brain impacts. This prompts reconsideration of how research in this area is conducted.
- [3]

- Livingstone, S. (2018). Review: iGen: why today's super-connected kids are growing up less rebellious, more tolerant, less happy- and completely unprepared for adulthood. There is a host of alternative explanations for the observed trends - for instance, concerning pressures on the education system, growing social inequality, racial and ethnic tensions, labour market instability, growing precarity, student debt, drugs policy, political disaffection, the undermining of health and welfare provision and more. The liveliest debate over the reception of the book centres on whether this is due to use of the smartphone or, perhaps, the cumulative effect of many adverse factors shaping children's lives, or, even, a greater openness to reporting mental health difficulties (and so, ultimately, a good thing, leading more to seek support rather than suffering in silence).
- McDool, E., Powell, P., Roberts, J., & Taylor, K. (2016). Social media use and children's wellbeing. Spending more time on social networks reduces the satisfaction that children feel with all aspects of their lives, except for their friendships; and that girls suffer more adverse effects than boys.
- Oberst, U., Wegmann, E., Stodt, B., Brand, M., & Chamarro, A. (2017). Negative consequences from heavy social networking in adolescents: the mediating role of fear of missing out. We analyze the role of fear of missing out (FOMO) and intensity of SNS use for explaining the link between psychopathological symptoms and negative consequences of SNS use. It was found that both FOMO and SNI mediate the link between psychopathology and CERM, but by different mechanisms. Additionally, for girls, feeling depressed seems to trigger higher SNS involvement. For boys, anxiety triggers higher SNS involvement.
- Orben, A. & Przybylski, A. (2019). The association between adolescent well-being and digital technology use. Nature Human Behavior. The association between digital technology use and adolescent well-being is negative but small, explaining at most 0.4% of the variation in well-being. Taking the broader context of the data into account suggests that these effects are too small to warrant policy change.
- [4]
- Primack... .
- [6] NIH ABCD Study. New research from the ABCD Study (Adolescent Brain Cognitive Development Study) finds that social media may be associated with positive benefits for younger kids. 20 research centers across the US scanning adolescents' brains.
- [7] Suicide [needs updating, waiting for new studies]. Suicide has declined slightly among youth worldwide since 1990. It has increased in the US starting in 2007. Social media use doesn't explain the increase in suicides among youth and there are arguments that the US increase is related to income inequity and a lack of a safety net when compared to Europe's drastic decreases.

on adolescents' social media experiences.

Summaries of selected internal research

Overall for teens there was no relationship between well-being on Instagram (how they felt while using Instagram) and TS on Instagram, although teens within the IG community scored worse than adults on general well-being, negative affect (US, UK, BR), loneliness (US, UK, BR), and depression (only in US) (x).

- Barriers to posting: Teens are more likely than adults to report barriers to posting, this is especially true with concerns about fitting a theme, having good captions and having good content.
- Stories reduces the anxiety to share: The ephemerality of the content creates a low pressure way for people respond reducing some of the anxiety around rejection.
- Identity: teens delete Feed media to curate their identity/profiles (Teen deletion to upload ratio is 0.47, Adults is 0.27)
- Teens and younger Instagrammers have more interest in having help managing their time on Instagram than adult Instagrammers
- [1]Well-being Levers for Teens on Social Media: Mixed method study shows that close relationships, self-worth and meanings in life, and feeling positive... the most important well-being dimensions for teens. Social media activities that involve direct interactions with others have the largest effect on well-being. [2018]
- [2]How do Teens talk about Well-being and Social Media?: This qualitative research project explored how teens talk about positive and negative effects of... participants thought the narratives around social media and well-being are driven mainly by adults and may not fully reflect the experience of teens. [2018]
- [3]
- Facebook can help alleviate feelings of loneliness. Teens (13-17) worldwide reported feeling less lonely than most other age groups, especially young adults (18-24), and were more likely to say Facebook helped them feel less lonely. Teens also rated their interactions on FB as more meaningful than any other age group.
- Messenger Kids Sentiment Survey: Both parents and kids view MK positively. On a scale of 1 to 5 (1 being most negative,... , had a lot of fun on MK (4.25), and are satisfied with their kids' MK experience (4.62). [2018]

- [4] [TO PUBLISHED EXTERNALLY] Everything's the Phone: Understanding the phone's supercharged role in parent-teen relationships: This mixed-method research project presents a conceptual model showing how parents' and... and contribute to positive connections between parents and their teen children. [2018] [peer-reviewed collaboration with University of Washington and accepted for CHI 2019 conference]
- [5] [TO BE PUBLISHED EXTERNALLY] Development of a survey instrument to assess teens' social media interactions and their effect on well-being. There are currently no validated scales to measure... will be submitted to a journal soon. There is a potential showcase for ABC segment, Comms is involved. (University of Wisconsin collaboration)
- [6] [TO BE PUBLISHED EXTERNALLY] Relationship between social media use and health/wellbeing of youth: This large-scale survey will be the first of its kind to assess a combination of... beyond the cross-sectional design and to use a parent-child dyadic approach to understand how social media affects well-being in youth. (University of Wisconsin collaboration)
- [7] [TO BE PUBLISHED EXTERNALLY] Assess short and long-term effects on social media use, health and well-being among teens. A pilot intervention will compare the American Academy of... compared to an awareness raising effort to determine which approach has positive effects on youth and parent social media experiences. (University of Wisconsin collaboration)
- [8] [TO BE PUBLISHED EXTERNALLY] Evaluate real-time associations between technology use and mood among teens. An Ecological momentary assessment (EMA) study will help us understand teens' technology use and mood changes in teens. (University of Wisconsin collaboration)
- [9] [TO BE PUBLISHED EXTERNALLY] Digital device use and family life: A 2x2 experimental design with parents and their children finds that there is no difference between using devices and not using devices in families' ratings of the meaningfulness of interactions provided families interact TOGETHER.

POPULAR RESEARCH AND ITS LIMITATIONS

- [1] Royal Society for Public Health, UK. Status of Mind. This research tries to link secondary data and survey data on platform use to how social media affects teens' mental health.
    - The study is methodologically flawed. It asks about platforms instead of behaviors.
- [2] Twenge, J (2017). iGen links social media use to less time spent in person arguing that that is resulting in unprecedented levels of anxiety, depression, and loneliness among today's youth.

Anja Dinhopl enabled the outline for the document Feb 15, 2019 at 6:37 pm

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tl;dr

- Social media can be positively or negatively affecting teens. More and more evidence that at-risk youth are also at-risk on social media. Social media does not create the risk, but it may exacerbate it. i.e. The most vulnerable teens 'offline' are also the most vulnerable ones 'online' (e.g. LGBTQ youth).
- DEPRESSION: There is no correlation between reported frequency of social media use and reported depressive symptoms among teens and young adults. This survey does not find a statistically significant association between depressive symptoms and how teens report using social media (i.e. "active" or "passive" behaviors on social media). Teens with depressive symptoms have HEIGHTENED experiences on social media, both more positive AND more negative. 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.

REVIEW OF SOCIAL SCIENCE LITERATURE

- [1] Rideout, V. & Fox, S. (2018). Digital Health Practices, Social Media Use, and Mental Well-Being Among Teens and Young Adults in the U.S. Hopelab Report (not academic journal). There is no correlation between reported frequency of social media use and reported depressive symptoms among teens and young adults. This survey does not find a statistically significant association between depressive symptoms and how teens report using social media (i.e. "active" or "passive" behaviors on social media). Teens with depressive symptoms have HEIGHTENED experiences on social media, both more positive AND more negative. 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. Teens and young adults with 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%). 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.
- [2] Weinstein, E. (2018). The social media see-saw: Positive and negative influences on adolescents' affective well-being. New Media & Society. Survey self-reports (n =...
- studies suggest that the relationship is U-shaped, where no use and excessive use can have a small negative impact on mental well-being, while moderate use can have a small positive impact. In the second part of the paper, the hypothetical idea of addiction to technology is introduced and scrutinized. This is followed by an overview of the hypothetical idea that digital technology might re-wire or hijack children's brains; an assumption that is challenged by recent neuroscience evidence. In conclusion, considerable methodological limitations exist across the spectrum of research on the impact of digital technology on child well-being, including the majority of the studies on time use reviewed here, and those studies concerned with clinical or brain impacts. This prompts reconsideration of how research in this area is conducted.
- [6] NIH ABCD Study. New research from the ABCD Study (Adolescent Brain Cognitive Development Study) finds that social media may be associated with positive benefits for younger kids. 20 research centers across the US scanning adolescents' brains.
- [7] Suicide [needs updating, waiting for new studies]. Suicide has declined slightly among youth worldwide since 1990. It has increased in the US starting in 2007. Social media use doesn't explain the increase in suicides among youth and there are arguments that the US increase is related to income inequity and a lack of a safety net when compared to Europe's drastic decreases.

INSTAGRAM RESEARCH & YOUTH WELL-BEING

- SSI: Depression related risk (negative) and our opportunity to support through friends (positive).
- Social Conflict: Teens weaponize IG features to torment each other, often without violating standards.
- Social Comparison (1, 2): Women and teens are more prone to social comparison, especially negative social comparison.
- Connections: Anxiety about which friends you aren't connected to (or engaging with) on IG / social media.
- Barriers to posting: Teens are more likely than adults to report barriers to posting, this is especially true with concerns about fitting a theme, having good captions and having good content.
- Stories reduces the anxiety to share: The ephemerality of the content creates a low pressure way for people respond reducing some of the anxiety around rejection.
- Identity: teens delete Feed media to curate their identity/profiles (Teen deletion to upload ratio is 0.47, Adults is 0.27)

Overall FACEBOOK RESEARCH & YOUTH Well-Being

POPULAR RESEARCH AND ITS LIMITATIONS

- [1] Royal Society for Public Health, UK. Status of Mind. This research tries to link secondary data and survey data on platform use to how social media affects teens' mental health.
    - The study is methodologically flawed. It asks about platforms instead of behaviors.
- [2] Twenge, J (2017). iGen links social media use to less time spent in person arguing that that is resulting in unprecedented levels of anxiety, depression, and loneliness among today's youth.
    - The research has been widely criticized for its methodological flaws and mischaracterization of available data. Best rebuttal by highly respected Sonia Livingstone here.

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List of Youth Social Science Research: Completed Studies and Roadmap

This is a semi-comprehensive list of studies related to social science topics (per the definition in the main memo) that have been completed recently or are on the roadmap. Due to time constraints there are likely holes in this list we should continue to fill out.

NOTE: STUDIES IN YELLOW INDICATE THEY ARE IN-PROGRESS OR ON THE ROADMAP FOR 2019

Overall Well-Being

- [1] Well-being Levers for Teens on Social Media: Mixed method study shows that close relationships, self-worth and meanings in life, and feeling positive are the most important well-being dimensions for teens. Social media activities that involve direct interactions with others have the largest effect on well-being. [2018]
- [2] How do Teens talk about Well-being and Social Media?: This qualitative research project explored how teens talk about positive and negative effects of their social media use. Teen participants thought the narratives around social media and well-being are driven mainly by adults and may not fully reflect the experience of teens. [2018]
- [3] Messenger Kids Sentiment Survey: Both parents and kids view MK positively. On a scale of 1 to 5 (1 being most negative, 5 being most positive), parent reported feeling very close (4.12) to their kids when interacting on MK, viewed their time spent on MK as very meaningful (4.28), felt happy (4.53) when on MK, had a lot of fun on MK (4.25), and are satisfied with their kids' MK experience (4.62). [2018]
- [4] Everything's the Phone: Understanding the phone's supercharged role in parent-teen relationships: This mixed-method research project presents a conceptual model showing how parents' and teens' relationships to their phones and perceptions of each other's phone use are inextricably linked and how, together...
- assess specific technology interactions. This tool will have significant contribution to the field of research for technology and youth (and go beyond the current platform-specific model). The survey has been developed and will be submitted to a journal soon. There is a potential showcase for ABC segment, Comms is involved. (University of Wisconsin collaboration)
- [6] Relationship between social media use and health/wellbeing of youth: This large-scale survey will be the first of its kind to assess a combination of variables, beyond the cross-sectional design and to use a parent-child dyadic approach to understand how social media affects well-being in youth. (University of Wisconsin collaboration)
- [7] Assess short and long-term effects on social media use, health and well-being among teens. A pilot intervention will compare the American Academy of Pediatrics' Family Media Use plan compared to an awareness raising effort to determine which approach has positive effects on youth and parent social media experiences. (University of Wisconsin collaboration)
- [8] Evaluate real-time associations between technology use and mood among teens. An Ecological momentary assessment (EMA) study will help us understand teens' technology use and mood changes in teens. (University of Wisconsin collaboration)
- [9] Digital device use and family life: A 2x2 experimental design with parents and their children finds that there is no difference between using devices and not using devices in families' ratings of the meaningfulness of interactions provided families interact TOGETHER.

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