Disconnecting and Reconnecting

A Photovoice Workshop on Healthy Social Media Use

Linda Charmaraman, Catherine Grevet Delcourt, Cynthia Serrano Najera, Emily Vargas, Alyssa Gramajo, Amanda M. Richer, and Anna M. Adachi-Mejia

Educators, parents, practitioners, and mainstream media often raise concerns about the dangers of social media for teenagers. Frequent social media use and exposure to sites that emphasize anonymity may be risky for young adolescents (Charmaraman, Gladstone, & Richer, 2018). However, with healthy limits, social media can improve social connectivity, enhance a sense of belonging, and provide forums for self-disclosure and identity exploration (James et al., 2017).

Early adolescents often hear messages like "Don't spend too much time on your phone!" Yet little is known about how middle school youth regulate their smartphone usage. To help fill that gap, we held a

LINDA CHARMARAMAN, PhD, is a senior research scientist at the Wellesley Centers for Women and director of the Youth, Media & Wellbeing Research Lab.
CATHERINE GREVET DELCOURT, PhD, is an assistant professor in computer science at Wellesley College.
CYNTHIA SERRANO NAJERA is a senior at Wellesley College majoring in computer science.
EMILY VARGAS is a recent graduate of Wellesley College who majored in English literature.
ALYSSA GRAMAJO is a research associate and project coordinator of the Youth, Media & Wellbeing Research Lab.
AMANDA M. RICHER is assistant methodologist at the Wellesley Centers for Women.
ANNA M. ADACHI-MEJIA, PhD, is a photovoice methodology specialist; at the time of this workshop, she was an associate professor at the Geisel School of Medicine at Dartmouth.

week-long summer workshop to explore early adolescents' perspectives on positive and healthy social media usage.

We used a community-based participatory action research model to design our social media curriculum around one specific middle school community, beginning by gathering perspectives from students, parents, and staff. This work shaped our workshop curriculum, which we piloted in summer 2019 with 13 students from this middle school. The workshop activities engaged participants in reflecting on their social media habits, using a method called *photovoice* to empower participants to share the world through their lenses. In the process, they developed interest in becoming producers as well as critical consumers of social media. Our long-term goal is to incorporate these participants' voices into a user-centered design process to build an app, website, or workshop to support healthy social media use. Our photovoice project provides an example of how to engage in a research-community collaboration to learn which social media and well-being issues are most salient in a school community. It is also a model to show afterschool or summer program providers how to conduct their own photovoice workshop.

Youth and Social Media

Previous studies of social media interventions to promote health in adolescents have found some success in engaging youth in the process of creating content, including videos (Barrett et al., 2017). Researchers have also documented limitations in the ability of these interventions to maintain participant engagement; some young people were not interested in the specific social media platform used or in posting on social media generally, did not have easy access to a mobile device, or were too busy (Yi-Frazier et al., 2015).

In 2018, more than 10 million youth were involved in afterschool programs (Moss, 2018) and 90 percent of teens used social media (American Academy of Child & Adolescent Psychiatry, 2018), yet we found limited research on afterschool programs that engage young people in learning healthy uses of social media. Our search found only seven articles (Afterschool Alliance & MetLife Foundation, 2013; Barnett et al., 2014; Davis et al., 2017; Felt et al., 2012; James, 2013; Mills et al., 2018; Vickery, 2014) that studied how social media and technology can be meaningfully incorporated in afterschool programs. Of these, three articles studied afterschool programs for high school youth; the other four programs were for both high school and middle

school participants. Research on this topic not only is limited but also can quickly become outdated, as social media and use of technology evolve almost daily.

Our workshop structure was informed by the limited prior work, capitalizing on three axes from these studies: identity construction, practice of safe social media use, and connections between science and participants' everyday lives.

The study focusing on the role of digital media in identity construction (Davis et al., 2017) described a program in which participants developed apps that others could use. In the process, participants were able to express their identities, navigate unfamiliar spaces, and connect their afterschool activities to their social contexts at home. This experience placed participants' interests at the center of the program, giving them freedom to express themselves and gain a positive sense of identity (Davis et al., 2017).

Another program taught middle school participants how to use social technology safely by practicing the tips they learned using an online safety skills program (James, 2013). The program leader who created the curriculum intentionally incorporated introductions to computer hardware and software into daily lessons to help participants master new technology skills, all while incorporating cyber safety suggestions. For example, the program reinforced a social network site with a safety feature that prevents users from using curse words.

The third study coupled a life-relevant science learning program with an integrated social media app to help learners connect science learning to their everyday lives (Mills et al., 2018). Participants created social media posts, including pictures, screenshots, and texts, that helped them explore rich connections between science and their lives, but only after they discussed their findings and questions. Researchers found that combining social media with practices such as prompting learners to discuss their posts and encouraging non-scientific posts revealed the rich contexts of participants' social media sharing (Mills et al., 2018).

Similarly, to harness the digital contexts with which youth already are familiar and provide hands-on activities related to their personal identities, our summer workshop used a research technique called *photovoice* (e.g., Wang & Burris, 2017). Photovoice projects invite participants to take photographs to define and communicate their unique perspectives in order to generate dialogue and initiate social action. For example, a photovoice project might showcase students'

safety concerns in a school or highlight health issues within an ethnic group. Photovoice is often used in public health studies that seek to engage and empower vulnerable participants (Farrah et al., 2013), including young people, whose voices are not often represented in the design of campaigns intended to improve their health. Instead of viewing young people as passive players suffering from the all-consuming demands of digital technology, photovoice allows them to try new personas as active storytellers and advocates for change (Kia-Keating et al., 2017). Using photovoice with social media can engage young people in digital citizenship and in meaningful, broad discussions about individual and community health and well-being (Bugos et al., 2014; Kia-Keating, 2009; Wang et al., 1998; Wilson et al., 2006). This research method is particularly well suited to engage teenagers in reflection on their social media usage because teens already use photos in nuanced ways to express themselves online.

Pre-Workshop Research

We are an interdisciplinary research team with backgrounds in out-of-school time program quality, positive youth development, community health, and human–computer interaction. Our community-based collaboration was based on our positive track record of partnership with a large suburban middle school in Massachusetts. The project started with the "need-finding" stage described below, in which we analyzed the results of large-scale student surveys and other data. This contextualization work shaped the structure and curriculum of the summer workshop.

Student Survey

We used the results of two large-scale surveys we administered in Massachusetts middle schools to inform our workshop. The first survey, funded by Children and Screens: Institute of Digital Media and Child Development in 2017–2018, included 700 responses from youth ages 11–16 (Charmaraman, Richer, & Moreno, 2018). Survey results showed that this age group was highly connected: 84 percent of respondents had a smartphone, and 78 percent used at least one social media site.

Our subsequent study of 772 adolescents aged 11–15, conducted in 2019–2020 with funding from the National Institutes of Health, focused on the relationship between social media usage and well-being (Charmaraman, Moreno, & Richer, 2020; Charmaraman et al., in press). We found that the age at which a teenager starts using social media can affect future online behaviors. For example, joining Instagram or Snapchat at age 10 or younger was significantly associated with more unsympathetic online behaviors, online sexual harassment, and digital addiction than was joining these services at age 11 and up (Charmaraman et al., 2020).

This study included a survey that asked what topics would be most relevant for a summer workshop about social media and well-being. In general, respondents were interested in learning how to have more agency, as shown in Table 1. We used these responses to help us structure the curriculum.

School Staff Focus Groups

Our community-based approach included taking time to learn about the school in which we planned to hold the workshop. We hosted two focus groups, one with teachers and one with counselors, to learn about the school's social technology and student well-being needs.

The teachers shared that they had not received much training about use of social media in their classroom. They noted that social media incidents outside of school frequently caused conflict between students. Teachers doubted that students would feel comfortable sharing their true feelings about social media in a group setting.

Table 1. Survey Responses Used to Structure the Social Media Workshop

Possible Topic for a Summer Workshop	Percentage of Respondents (N = 772)
Making the world a better place	68%
Improving self-esteem	65%
Reducing loneliness and depression	61%
Taking more breaks from social media	59%
Providing social support to others	59%

The counselors overwhelmingly expressed negative perceptions of social media due to frequent incidents involving students, such as mean comments about peers and illicit photos of other (mainly female) students. Like the teachers, the counselors expressed concern that the workshop would not reach the students who could benefit most—those with behavioral problems related to social media use. In response to this observation, we made sure to recruit participants who were representative of the student body as a whole.

This information helped to inform our approach of incorporating photovoice activities into the curriculum. Learning from the teachers and counselors that photos had been used for cyberbullying and harassment while simultaneously learning from survey results that students were curating their photos on social media, we decided to feature activities to help participants understand how powerful photos are, especially when shared online.

Participant Pre-Workshop Survey

For the workshop, we recruited 13 participants, six girls and seven boys, who were entering grade 7, 8, or 9 in fall 2019. To recruit these participants, we contacted parents who had completed an online survey about their teen's social media use and had indicated interest in their teen participating in a summer social media workshop. The participants reflected the diversity of the larger school community: five were White, three Latinx, two Asian, and three Black or biracial Black.

In order to tailor the workshop content, which included computer topics as well as social media knowledge, we conducted a pre-workshop online survey with participants about their STEM experience and artistic inclinations. The most popular interest was in creative arts: visual arts, music, and poetry. Next was learning how to create a website or application. About a third of participants had learned how to code on their own or had uploaded their own YouTube content. Fewer had ever attended a STEM-focused afterschool program or camp. Most respondents already owned a smartphone; 58 percent had received their first smartphone at age 10 or younger. Half of respondents reported that they sometimes or always posted photos on social media; the

other half rarely or never posted photos. More than half reported that they checked their social media at least every few hours, while less than half checked every few days or rarely. The most commonly used social media platform was YouTube, followed by TikTok, WhatsApp, Snapchat, Instagram, and a long list of less common sites. Only one-third of the participants reported that they often or always "like" or comment when a friend shares good news online. Most participants had attempted to raise awareness about a social issue through social media posts.

Photovoice Workshop Structure

Using the results of our large-scale surveys and of the participant survey, we developed the four-day curriculum in daily themes, described below. Each day the schedule was divided into a digital well-being unit and a STEM unit related to the daily theme. The workshop included a well-being objective and a STEM objective:

1. To engage participants in reflection about social media and well-being
2. To introduce participants to core computing concepts, such as bits and code, and to internet concepts such as identity and privacy

The workshop entailed a combination of lectures, whole-group and small-group discussions, interactive activities, guest speakers on health promotion and STEM careers, reflective exercises, a design-based project to develop an app for healthy social media use, and photovoice activities. Throughout the week, participants worked in small groups on their culminating project: a text-based slideshow or video recording offering advice to someone just starting to use social media.

This article focuses on our use of photovoice to engage participants in reflecting on social media usage and well-being. For the photovoice activity, participants took at least three photographs in response to prompts related to each daily theme. The photovoice prompts were introduced daily as homework for the following day's discussion. Generally we provided more than one option to appeal to as many participants as possible.

Before we sent participants out to take photographs, we established procedures with them, as rec-

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ommended by Bugos and colleagues (2014), and taught them ethical practices in participatory photography. Following Wang's (2006) recommendations, we emphasized the responsibilities of the photographer, safety issues, and ways to minimize risk. Using guidelines outlined by Wang and Redwood-Jones (2001), we covered how participants could:

• Maintain their personal safety while taking photographs
• Use responsibly the power that comes with taking photographs
• Follow ethical practices and respect their subjects' privacy
• Approach potential subjects to ask for signed permission to take their picture (Wang & Redwood-Jones, 2001)

Once participants had captured their photographs, they prepared captions to share with the group, keeping in mind that their goal was to identify how they interpreted the day's prompt and potential solutions to the problem posed. We asked participants to examine their photographs using the SHOWeD acronym (Catalani & Minkler, 2010; Wallerstein, 1987):

• What do you See here?
• What is really Happening here?
• How does this relate to Our lives?
• Why does this problem or this strength exist?
• What can we Do about this?

This process led to in-depth ongoing dialogues about the dilemmas adolescents face around healthy social media use, how they can promote positive use in their online peer culture, and how they can use social media to raise awareness of social issues they care about.

After each day's discussion, workshop leaders conducted a thematic analysis of the discussion and a content analysis of the photographs. We clustered similar codes and then categorized them by preliminary categories created from the group discussion. We repeated the process for all transcript and photographic data, expanding, collapsing, and restructuring categories to fit the data until themes became evident.

Workshop Implementation

We implemented the workshop in person Monday through Thursday, 10 am to 2 pm, at the school. The program was free to participating families, and the school offered free lunches. Morning activities centered on discussions of well-being, reflections on the day's photos, and introduction of new photovoice prompts for the next day. The afternoons centered on STEM activities and project-based activities. Each day had a theme based on our pre-workshop research.

Day 1: Fear of missing out (FOMO). In discussing how they used their phones and social media, participants highlighted how easy it is to experience FOMO. For example, one said:

Maybe your friends are doing something without you knowing, and you are sad they did it without you…. If you hear someone talking about it in the hallway at school or if you see it on social media, you could feel upset that you are left out.

In response to these concerns, we introduced the concept of online addictive behaviors, outlining how these behaviors begin and how young people can proactively protect themselves by being more reflective about their use of social media. The first photovoice prompt offered two questions from which participants could choose:

• In what ways do you experience FOMO?
• If you could not access your phone, TV, internet, games, or digital devices for one week, what would you do instead?

Day 2: Mental well-being. The group discussed how much depression and social anxiety may be related to social media use and how participants could track the digital footprint of their state of mind or mood by using apps over time. The photovoice prompt again offered two choices:

• What are triggering aspects of social media that foster social isolation or social anxiety?
• In what ways can you provide social support or boost someone's well-being on social media?

Day 3: Self-esteem. The group discussed self-esteem, social change, and use of privacy settings and positive feedback to promote health and well-being in online communities. The photovoice prompt was, "How will you make a positive difference in this world?"

Day 4: Synthesis. Participants showcased their final photovoice project, which offered the advice they would give to someone who is starting social media for the first time, using one of the well-being topics from the workshop.

Photovoice Themes

By the end of the workshop, the group had generated almost 100 images and captions. Workshop leaders categorized the images into five themes:

1. Providing social support online
2. Boosting self-confidence, self-esteem, and self-care
3. Managing technology in the family context
4. Avoiding FOMO
5. Addressing social issues

Theme 1: Providing Social Support Online

During the daily discussions, participants discussed the meanings they saw in the photos they submitted. Some mentioned helping others when they saw them struggling online, for example, "I see on other people's posts, usually they'll have something polite. I see those comments almost every day: 'Have a great day' or 'I hope you feel better.'" One participant emphasized that he would "support people if they needed help on social media or give them advice and try to make them laugh." One participant described a selfie he had taken while posting a greeting to his mom (Figure 1).
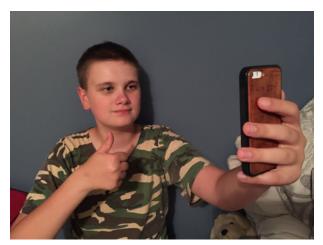

Figure 1. "I am helping my mom feel better by giving her a thumbs up on social media."

Participants often submitted memes or reposted inspirational quotes from other sources. For example, in response to the Day 2 prompt about how to boost peer well-being, one participant posted a meme that said, "Hey you! Just remember: You are capable…. You are strong. You can do this!" In the discussion, participants said that they often saw messages like this when people wanted to cheer up their friends.

Theme 2: Boosting Self-Confidence, Self-Esteem, and Self-Care

Many of the photos related to "getting off and getting out": putting down devices to experience the outdoors or try something new. Some recommended self-care activities, such as exercise, cooking, or practicing a musical instrument. Others suggested spending more time with loved ones: "Family and friends are more important than machines." One small project group wanted to include photos of different types of interests in the social media app they were designing in order to remind users of their nondigital worlds.

One participant mentioned that social media platforms that emphasize "likes" and comments can contribute to users' low self-esteem:

> On VSCO [a photo-oriented platform] … there are no likes, and you just post for fun…. I don't care how many likes I get on a post, but it makes some people not feel good if you don't get as many likes on Instagram. And [because] you can't like on VSCO, it makes you feel better.

Body image and self-esteem were recurrent issues. Several participants talked about promoting positive body esteem by appreciating others' photos and posts, for example, "My friend posts on Instagram, 'You look beautiful and you'll do great today!' And it makes me feel really happy." One participant revealed that body image was an ongoing issue on social media:

> I tend to compare myself with a lot more skinnier people. So then I look at myself and say, "Oh, my god, I'm so fat." And some days I feel good about myself, but some days it's just like I need to work on something.

By contrast, another participant proudly displayed the "natural" selfie shown in Figure 2.

Theme 3: Managing Technology in the Family Context

In group discussions, participants often talked about their family's role in socializing their technology use. They reflected on the roles family members—including parents, siblings, and even pets—played in how participants navigated their technology use.

Many participants said their parents often restricted their technology use. Some wanted parents to understand their motivations, because using their phones was not merely a waste of time. One said:
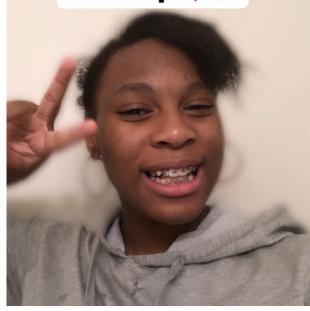
Figure 2. A participant finds her natural beauty.

You can use your phone for good things too, not just social media. You could search recipes, research something, or use it for homework. But parents just think it's bad for you. And you're really bored if you're not on it, but they don't give you anything to do.

A recurring theme of the group discussions was that parents had difficulty disconnecting from their devices but expected their children to do so. Some of the photo captions reflected participants' perception that family members were too distracted by phones to spend time with them:

- "Mommy, get off your phone. I will pay to get our nails done."
- "Put down your phone when you go out to dinner, please."
- Mom, do something else, anything else."

In contrast to stories of competing with pervasive technology for parents' attention, other photos focused on family members with whom the participants spent quality time, with captions like these:

- "This is a picture of my siblings and I celebrating Christmas together!"
- "This is my family. We had to wear ugly sweaters for Christmas."
- "When I'm with my aunt, I rarely get to be on my phone."

A surprising proportion of photos included family pets, which seemed to distract participants from technology use. Several photos were of participants playing with or training their dog (Figure 3). One participant combined human family with pets in a photo whose caption read, "This is me at my aunt's farm. My aunt has a lot of dogs and one of her dogs had puppies. This is one of them!" Another participant combined pets with exercise, another recommended non-tech activity: "Take your dog on a bike ride? Here's a quick and easy way!"

Figure 3. A participant demonstrates training his dog, a non-technology activity he enjoys.

Theme 4: Avoiding FOMO

In the final day's culminating photo or video presentation, many participants focused on creative ways to avoid FOMO. One group recommended taking breaks from social media to avoid the discomfort of feeling left out: "When the summer seasons hit, most people will be going to a pool or a beach and will be post-

ing about having fun. If you want to avoid feeling left out, don't go on social media during summer." Another group suggested focusing on digital content that can't inspire FOMO: "Instead of looking at your friends, you can look at memes so you just laugh instead of feeling lonely." Another recommended unfriending people who trigger negative emotions: "If people are boasting about how much fun they're having, just unfollow or block the people. Then you won't see all the people having fun without you."

In one photovoice video presentation, two middle school girls act out a FOMO scenario. One girl is talking on the phone about an upcoming party. When the other girl inquires, she is quickly told, "Sorry, it's for cool kids only." As the scene ends, the two participants join in encouraging viewers to avoid creating FOMO in others: "Invite everyone to your activities. You are all the same." In another video project, two middle school boys record an everyday middle school experience: walking the halls of their school. They encourage viewers to avoid FOMO situations by "including everyone and not posting pictures of you having fun because others will feel bad about themselves." They go on to suggest that "FOMO is mostly caused by social media." In a third video, a group of middle school girls discusses the meaning of FOMO and how to combat it. Instead of scrolling through social media sites, they suggest, young people can "go outside and play sports," "hang out with friends and family," "do chores around the house," or "go to the playground."

Theme 5: Addressing Social Issues

The Day 3 prompt asked participants to show how they wanted to make a difference in the world. Participants responded with photos and memes about issues that mattered to them. The most popular issue was the environment. For example, one participant shared a meme with the caption "Try not to use plastic straws 'cause they find their way into the ocean and can hurt marine life." The next most popular theme was animals and animal rights; see Figure 4. Another common theme was compassion or empathy for others, exemplified by a meme showing a girl with Down syndrome in a yoga pose whose caption had to do with changing how "the world defines and views disability."

Reflections and Feedback

On the final day of the workshop, we conducted a closing focus group with all participants to find out what they had learned during the week's activities. We asked

Figure 4. "Yesterday I was on a bike ride and I found a turtle trying to cross the road, but he was really slow and he might have gotten hit by a car, so I picked him up and brought him to the other side of the road."

what social media topics would be most critical to bring to the attention of the whole school in an assembly. Most participants chose FOMO. When we asked them to reflect on what they would take away from the workshop, 10 out of 12 referred to one of the well-being topics, particularly FOMO, addiction, and social isolation. Here are some sample comments:

- "I learned about fear of missing out and how to not be alone."
- "I learned that most kids are addicted to their phones, and there are ways to stop being addicted."
- "I learned that a lot of people will treat people different, but even though they are different we are all the same."

In the post-workshop survey, most respondents agreed that they had discussed the workshop topics with their families and friends, planned to use the concepts they learned in a future class, and would be interested in participating in a follow-up workshop. These results encouraged us to continue developing this curriculum.

Implications and Future Directions

This workshop confirmed that photovoice is an effective method for engaging middle school participants in topics related to social media and well-being. Early adolescents generally are already avid users of photo-based social media platforms. The structure of our summer workshop gave participants opportunities to use photos and captions to create digital stories. In the process, they

reflected on the images and comments they produce and distribute online and discussed how the transactional nature of social media can affect their own and others' well-being. Participant photos and captions reflected on the addictiveness of technology and envisioned strategies for self-care, including creative ways to disconnect from technology, often by reconnecting in real life with peers, family members, and pets.

Our long-term goal is to unpack how early adolescents see their online and offline worlds. Photovoice can provide fun yet educational activities on a topic in which young people are highly motivated to engage. The process of thinking about what photos to take, what to share, what to say about them to others, and what to do next provides an activity structure that can help to mobilize youth on a topic of interest. Our approach offers a structure for afterschool program staff to facilitate youth empowerment. The process can help participants think about ways to safeguard their own digital well-being and that of their peer and school communities.

Acknowledgments

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