



Developing Healthy Social Media Practices: An Outpatient Caregiver-Adolescent Group Intervention

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Abstract

Adolescents frequently use social media to connect with peers, develop friendships, and explore their identity. However, some adolescents, particularly those with co-occurring mental health concerns or other vulnerabilities, may experience problems or dysfunction related to their social media use. Navigating online social interactions, regulating one's own use of social media, and being aware of how content of social media may impact users are important skills that youth need to build in today's digital age. The purpose of this paper is to describe the rationale for, and components of, a group therapy intervention (Developing Healthy Social Media Practices) for caregivers and their adolescents that seeks to (a) provide psychoeducation about the risks and benefits of social media use; (b) teach youth and their caregivers online social problem solving skills; (c) facilitate caregiver-adolescent communication about online social interactions and other online risks; and (d) promote motivation to change social media practices that youth and their caregivers identify as impacting functioning.

Keywords Social media · Body image · Screen time · Smartphone · Problematic media

Social media, including social networking sites and applications, are widely popular among adolescents. The COVID-19 pandemic has accelerated the use of social media given that adolescents experienced a marked decrease in face-to-face social interactions due to school closures and public health social distancing guidelines. Given the popularity of social media, research has considered both the positive and negative aspects of social media engagement. Social media has been linked to positive outcomes for adolescents, including relationship formation or maintenance (Lenhart et al., 2015) and exploration of identity (Uhls et al., 2017). These positive, or potentially negative, effects depend on *what* adolescents view on social media, *when* they are using it, and *how* they are using it.

Determining *what* adolescents are viewing on social media is crucial to determining how it will affect them. For

example, viewing idealized images, pro-anorexia or pro-bulimia content, and experiencing negative feedback from peers about appearance on social media can contribute to lower self-esteem (Woods & Scott, 2016), greater body dissatisfaction (Stronge et al., 2015), and higher self-objectification (Hanna et al., 2017). Similarly, social media content that discusses or depicts self-injury may be triggering to high-risk youth, given its association with suicidal ideation and history of non-suicidal self-injury (Nesi et al., 2021). Thus, social media content may differentially impact youth depending on their pre-existing mental health concerns or risk factors. *When* adolescents use social media (e.g., at or after bedtime, during mealtime, while completing schoolwork) also appears to drive whether outcomes are positive or negative. For example, recent research suggests that the link between social media use and depression, poorer well-being, and other internalizing symptoms could be explained by disrupted sleep and shorter sleep duration for adolescents who view social media in the evening (Vernon et al., 2015, 2017). Finally, *how* adolescents use media (i.e., their motivations for using social media and how they engage with content) also affects its impact on youth. Adolescents and young adults who engage in social comparison on social media (instead of using the platforms to connect with friends

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or to express oneself) have poorer body image-related outcomes (Hogue & Mills, 2019; Meier & Gray, 2014).

Taken together, there are elements of social media use that exacerbate risk and others that may be beneficial to adolescents. As such, providing psychoeducation on how to maximize the benefits of social media and reduce risks may be necessary for adolescents. In addition to enhancing adolescents' awareness of risks associated with social media use, scaffolding the development of problem-solving skills and communication about online experiences to trusted individuals has become increasingly important. Communication about cyber-victimization is particularly important, due to it affecting nearly 20% of adolescents (Baiden et al., 2020; Saltz et al., 2020). Even though most adolescents report that receiving support from friends and family is helpful for dealing with cyber-victimization (Fanti et al., 2012), they frequently avoid disclosure due to fear that it won't actually help or that they may lose the opportunity to continue using social media (Makri-Botsari & Karagiannioften, 2014; Mishna et al., 2009). Adolescents with co-occurring mental health concerns (or adverse childhood experiences; Domoff et al., 2021) are particularly at risk for cyber-victimization or other types of problematic media use. Both anxiety and depression have been found to predict later problematic media use among adolescents (Kircaburun et al., 2019), and this association was particularly strong during the pandemic (Magis-Weinberg et al., 2021).

To our knowledge, interventions that seek to address aspects of adolescents' "screen time" focus on limiting use or doing digital detoxes, versus skill-building; we could not identify other interventions for high-risk adolescents who already experience problems due to their social media use. As such, we fill this gap in clinical practice by describing the components of the Developing Healthy Social Media Practices intervention and offer future directions for clinicians eager to assist adolescents in more successfully navigating social media experiences.

Developing Healthy Social Media Practices Intervention.

Program Development

The Developing Healthy Social Media Practices intervention was developed to provide psychoeducation about healthy social media use to adolescents and their caregivers. The program was developed for adolescents ages 11 years or older, due to the focus being primarily on social media use. The intervention consists of six group sessions, implemented weekly, with separate adolescent and caregiver groups that are run simultaneously. While the groups do not have set sizes, having 5–10 dyads would likely be most feasible. During the final two sessions, the caregiver

and adolescent groups join for portions of the session to complete activities collaboratively. The caregivers and adolescents review and discuss similar topics related to social media in their separate groups, allowing for the dyads to discuss the topics between sessions. The intervention was developed with the intention of being implemented in mental health clinics, with mental health practitioners leading the caregiver and adolescent groups. See Table 1 for a summary of the adolescent and caregiver sessions.

The Developing Healthy Social Media Practices intervention was developed within a cognitive behavioral theoretical framework. The primary therapeutic approaches used within sessions include (1) psychoeducation, (2) development of problem-solving skills, and (3) motivational interviewing. While there is not yet evidence supporting the use of these techniques in facilitating healthy social media use, there is evidence for their use in decreasing other problematic behavior (Eskin et al., 2008; Holtkamp et al., 2005; Naar-King, 2011). For the adolescent sessions, the first two sessions focus on educating participants about healthy social media use, the following three sessions focus on using a problem-solving model, and the final session builds motivation to make healthy changes in their social media practices.

This intervention is most appropriate for adolescents who are experiencing conflict related to social media use or are engaging in risky behavior through social media. This problematic behavior could look like an adolescent posting inappropriate images on these sites, sharing private information, or consuming content that has negatively affected their mental health. There are several measures that clinicians may wish to use to screen for problematic media use; adolescents who score high on these measures (or adolescents' whose presenting concerns involve dysfunction due to their smartphone or social media use) may find a program like Developing Healthy Social Media Practices helpful. For example, in our clinic, we use the Problematic Media Use Measure (PMUM; Domoff et al., 2019) with caregivers to screen for problematic use of a various types of media/mobile devices in their children. For teens, we screen for "addictive" phone use with the Addictive Patterns of Use scale (APU; Domoff et al., 2020). Further, incorporating questions regarding exposure to harmful content online, experiences with cyber-victimization, and issues with unwanted/non-consensual disclosure of sexts are necessary for any clinician working with children in today's digital age (see Domoff et al., 2020 for an interview guide). Experiencing digital stress and cyber-victimization is linked to depression and rejection sensitivity (Nick et al., 2021). As such, youth with these internalizing symptoms may also benefit from skill-building around healthy social media use and could be referred to this intervention.

Table 1 Overview of the DHSMP Outpatient Intervention – Adolescent Group

Session	Goals	Activities
1: How Social Media Content Affects Adolescents	<ol style="list-style-type: none"> 1. Increase adolescents' awareness of how social media affects self-image and relationships 2. Facilitate adolescents' ability to recognize negative and positive social media content 	<ol style="list-style-type: none"> 1. Discuss and identify harmful social media content 2. Discuss how social media content reflects unrealistic standards <ol style="list-style-type: none"> a. Complete "Filtered Images" activity 3. Discuss the effect of positive social media content
2: Motivations for Posting on Social Media	<ol style="list-style-type: none"> 1. Facilitate adolescents' ability to recognize their motivations for using social media 2. Educate adolescents about the consequences oversharing on social media 3. Help adolescents identify coping skills to prevent harmful social media use 	<ol style="list-style-type: none"> 1. Watch video describing social media oversharing and discuss consequences of oversharing 2. Identify and discuss motivations for creating different types of social media content 3. Discuss positive coping skills that can prevent harmful social media use <ol style="list-style-type: none"> a. Play "Coping Skills Bingo"
3: Context of Social Media Use and Introduction to iSOLVE	<ol style="list-style-type: none"> 1. Increase adolescents' understanding of how context of social media use impacts their health and functioning 2. Facilitate adolescents' identification of barriers to changing when and where they use social media 3. Facilitate adolescents' use of a problem-solving framework to manage social media problems 	<ol style="list-style-type: none"> 1. Discuss different contexts in which adolescents use social media and potential negative consequences <ol style="list-style-type: none"> a. Complete "Puzzle Competition" activity 2. Discuss barriers to adolescents decreasing their use of social media in specific contexts 3. Introduce iSOLVE problem-solving model
4: Social Media and Problem Solving	<ol style="list-style-type: none"> 1. Enhance adolescents' problem-solving skills related to improving social media practices 	<ol style="list-style-type: none"> 1. Review iSOLVE and model using the framework to generate solutions to social media problems 2. Lead adolescents in using the iSOLVE model to solve example problems
5: iSOLVE and Cyberbullying	<ol style="list-style-type: none"> 1. Enhance adolescents' capacity to reflect on their social media practices 2. Develop adolescent's understanding of cyberbullying and how they can decrease it 3. Enhance adolescent's problem-solving skills by practicing use of the iSOLVE model with caregivers 	<ol style="list-style-type: none"> 1. Discuss adolescent's use of the iSOLVE model with their individual social media problems. 2. View video about cyberbullying and discuss how other adolescents are preventing harmful social media use 3. Lead adolescents and caregivers in practicing use of the iSOLVE model together
6: Privacy, Harm Reduction, and Personalized Social Media Use Plan	<ol style="list-style-type: none"> 1. Develop adolescent's ability to prevent negative social media experiences 2. Facilitate adolescents' reflection on ways that they can improve their social media practices 3. Foster collaboration between caregivers and adolescents on social media use goal setting 	<ol style="list-style-type: none"> 1. Discuss use of privacy settings and counter-speech skills to prevent negative experiences on social media 2. Lead the development of Social Media Use Plans personalized to adolescents' specific practices 3. Lead a discussion between caregivers and adolescents about improving social media practices

Developing Healthy Social Media Practices Intervention: Adolescent Sessions

Beginning with the adolescent group, the first session focuses on helping adolescents understand how their social media use affects them. This process begins with adolescents learning to identify which social media content is harmful and has a negative effect on them. Specifically, the adolescents learn about social media content that reflects unrealistic standards for daily life, and how this type of content can result in harmful comparison of lifestyles. Adolescents

complete an activity ("Filtered Images") in which they view social media images that have been edited to portray content creators positively. However, once the "unfiltered" background of these images is revealed, it becomes clear that they are not accurate representations of daily life. Adolescents are encouraged to find and discuss their own examples of content that affect their mood, either positively or negatively. In piloting this intervention, adolescents frequently discussed seeing posts of friends and Instagram influencers (e.g., celebrities, models) that emphasized a "perfect" life; often, for adolescent females, the content related to displays of the perfect body or appearance or appearing to have it all.

Table 2 Overview of the DHSMP Outpatient Intervention – Caregiver Group

Session	Goals	Activities
1: Social Media Apps and Context	<ol style="list-style-type: none"> 1. Increase caregivers' awareness and understanding of the social media apps that adolescents are using 2. Increase caregivers' understanding of how the context of social media use impacts adolescent's functioning 3. Increase caregivers' awareness of resources available to review and manage social media apps 	<ol style="list-style-type: none"> 1. Discuss popular social media apps and their uses 2. Discuss different contexts in which adolescents use social media and how it may affect their functioning 3. Review online resources that caregivers may use to gather more information about social media apps
2: Social Media Content and Motivations	<ol style="list-style-type: none"> 1. Facilitate caregiver's identification of motivations for and consequences of creating social media content 2. Increase caregiver's understanding of negative and positive social media content and how it affects adolescents 	<ol style="list-style-type: none"> 1. Discuss adolescent's motivations for and consequences of oversharing or creating harmful social media content 2. Discuss how consuming social media content can have negative or positive effects on adolescents
3: Caregiver Mediation Techniques	<ol style="list-style-type: none"> 1. Increase caregiver's knowledge regarding methods to monitor social media use 2. Increase caregiver's ability to keep their adolescents' social media accounts secure 3. Facilitate caregivers' management of adolescent's social media problems 	<ol style="list-style-type: none"> 1. Discuss how caregivers can restrict and monitor their adolescent's access to social media 2. Identify resources that caregivers can use to manage their adolescents' social media use 3. Review resources that can assist caregivers in solving social media problems
4: Modeling Healthy Social Media Use	<ol style="list-style-type: none"> 1. Raise awareness of how caregiver media use influences adolescent media use 2. Help caregivers identify their barriers to modeling appropriate media use 3. Facilitate caregivers' problem-solving skills for social media problems 	<ol style="list-style-type: none"> 1. Discuss how caregivers can model appropriate media use for their adolescents and barriers to identify barriers to improving their own media use 2. Provide education about the iSOLVE model and lead caregivers in using the framework to solve example problems
5: Addressing Problems with Media	<ol style="list-style-type: none"> 1. Increase caregivers' knowledge of and comfort with discussing cyberbullying and sexting 2. Facilitate communication between caregiver and adolescent about social media use and problem-solving 	<ol style="list-style-type: none"> 1. Provide recommendations for how caregivers can discuss sexting and cyberbullying with their adolescents 2. Discuss strategies for promoting resilience and open communication 3. Lead adolescents and caregivers in practicing use of the iSOLVE model together
6: Personalized Household Media Use Plan	<ol style="list-style-type: none"> 1. Facilitate caregivers' reflection on household media practices and identification of those that can be improved 2. Enhance caregiver's ability to identify goals for their household's social media practices 3. Increase parent and adolescent collaboration to work towards media use goals 	<ol style="list-style-type: none"> 1. Lead caregivers in discussing their household's social media practices 2. Instruct caregivers in creating a personalized household social media plan 3. Lead a discussion between caregivers and adolescents about improving social media practices

The second session focuses on helping adolescents identify when they are sharing too much information through social media (“oversharing”) and identify their motivations for creating social media content. Adolescents view a short video discussing social media oversharing and discuss the negative consequences of creating revealing content. The facilitator engages the clients in discussing how negative emotions can lead to harmful social media posting (wherein too much personal information is shared and non-helpful responses may ensue), and how coping skills can help them manage these negative emotions in healthy ways. The adolescents then play “Coping Skills Bingo,” which helps them

identify new coping skills to use when they are motivated to use social media in unhealthy ways.

In the following session, the topic turns to the context of social media use. Adolescents learn about and discuss contexts in which social media use can become harmful, such as at bedtime, when socializing, during class, and while driving. The adolescents then complete the “Puzzle Competition” activity, which illustrates the distracting nature of social media notifications. In this activity, the adolescents are divided into two groups, with each group given a puzzle to complete. The two groups race to complete the puzzle first; however, one group is frequently stopped by the facilitator because of social media “notifications.” After

the activity, the adolescents discuss the interference of these notifications, and how the activity was similar to daily life. The adolescents discuss their individual barriers to decreasing the distraction of social media in specific contexts.

In the fourth session, the adolescents begin practicing their use of the iSOLVE problem-solving model. The model outlines steps that adolescents can take to solve the problems they encounter through their social media use. They learn how to *identify* the problem, *generate* solutions for the problem, *organize* their solutions, *look* for the best solution, *venture* out to try the solution, and then *evaluate* the success of their problem-solving. After the facilitator leads the adolescents through an example scenario, the adolescents are then given worksheets and tasked with working through a problem they have experienced on social media. Adolescents are asked to discuss their problem-solving scenario with the group, and then are given the assignment to continue working through the model before the next session.

The fifth session focuses on educating adolescents about cyberbullying, and how they can use the iSOLVE model to manage cyberbullying situations. After discussing their iSOLVE practice from the previous session, the adolescents view a short video about cyberbullying. The adolescents discuss the video and are introduced to the use of iSOLVE to manage cyberbullying. The adolescents' caregivers then join the session, and the facilitator leads the dyads in using the iSOLVE model together.

The sixth and final session combines the skills that the adolescents have learned throughout the previous sessions and helps them create goals for their future social media use. The adolescents first learn about ways to prevent social media problems, such as ensuring they have appropriate privacy settings. They also learn about using counter-speech skills to manage social media disagreements, and practice identifying appropriate responses to cyberbullies. After learning these additional skills, the facilitator encourages the adolescents to reflect on their current social media practices and identify areas for improvement. Based on this reflection, the adolescents create a Social Media Use Plan. After the caregivers join the adolescents, the dyads are instructed to discuss these plans and goals for developing healthier social media practices.

Developing Healthy Social Media Practices Intervention: Caregiver Sessions

The focus of the first caregiver session is to ensure that all caregivers have a basic understanding of which social media applications their adolescents are using and how they are using them. The caregivers discuss which applications they are aware of, and what they believe their purpose is. After

this discussion, the caregivers are introduced to resources (i.e., commonsensemedia.org) which can inform them about the positive and negative qualities of different social media platforms. The caregivers then discuss how social media use can affect adolescents in different contexts, including bedtime, during social interactions, during the school day, and while driving. The caregivers are tasked with talking to their adolescent about which social media platforms they are using before the next session.

The second caregiver session focuses on the content that adolescents are consuming through social media. First, caregivers reflect on how they asked their adolescent about which social media platforms they use, and how successful that conversation was. Caregivers then discuss the differences between positive and negative social media content, and what impact it has had on their adolescents. The facilitator then introduces the concept of oversharing and reviews potential consequences that adolescents may face if they share too much private information online. The caregivers discuss motivations for their adolescents' social media use, and how it affects the content that they create or consume.

After reviewing the context and content of social media use, caregivers then learn about strategies they can use to mediate their adolescents' social media use. The third session begins with a discussion about which strategies caregivers are already using to monitor social media engagement, and the facilitator then provides recommendations for helpful techniques. Caregivers then learn about basic rules for privacy settings on social media applications and how they can help ensure that their adolescents' information is safe. The facilitator reviews online resources that caregivers can use to support their active mediation strategies, and provides information about restrictive mediation tools (i.e., products that limit and monitor social media).

Session four provides an opportunity for caregivers to reflect on their own social media use and how it may impact their adolescents' habits. The facilitator provides recommendations for household rules regarding technology and leads caregivers in discussing improvements that they can implement in their social media use. The caregivers then learn about the iSOLVE model, and how they can model critical thinking skills for their adolescents. The caregivers discuss how they can use the model to help their adolescents solve social media problems.

The fifth session continues the conversation about potential problems that adolescents may face online, particularly cyberbullying and sexting. The facilitator provides education and recommendations for how to have conversations with adolescents about sexting and cyber-victimization. Caregivers join their adolescents prior to the end of this session to practice using the iSOLVE model together. The facilitator attends to caregiver-adolescent interactions that

are not conducive to effective communication or other barriers to successfully navigating these topics and is addressed in the final session.

In the final caregiver session, the focus is on making household goals for healthy social media use. Caregivers discuss how social media practices can be improved in their household, and what potential barriers may prevent these improvements. The facilitator addresses challenges they witnessed in the prior session as an area of future focus to be discussed with the adolescent's individual therapist. After identifying goals for their household, the caregivers complete a Household Media Use Plan that outlines these changes. The caregivers spend the remainder of the session with their adolescents, discussing the plans that they have each created and how they can implement the proposed goals.

Facilitating Continued Work on Social Media Behavior Change Goals

The Developing Healthy Social Media Practices Intervention was designed as a stand-alone treatment option for adolescents experiencing problematic social media use. It is not necessary that the adolescent also receive individual therapy; however, for many it will be beneficial to continue working towards developing healthy social media practices with a therapist. This will be especially important for adolescents who have experienced severe interference with their daily functioning due to social media use. Individual therapists should be provided the resources and activities discussed in the program sessions, as many of these can be more thoroughly discussed in a one-on-one setting. For example, therapists can continue to help adolescents identify how social media content is affecting their emotions, and how to continue the use of coping skills identified in "Coping Skills Bingo." If caregiver-adolescent dyads are continuing to struggle with open communication about social media use, this may also be an area better addressed and facilitated by an individual therapist.

Individual therapists can also play a significant role in helping adolescents and caregivers implement their social media use plans after the final session. While some adolescents may not need support in reaching their goals, those with more challenging goals will benefit from tracking of their behaviors and continued help with addressing barriers to behavior change. Additionally, it may be helpful for therapists to assist families with creating reward systems for meeting goals, so that there is increased motivation to develop healthy social media use. While much of the work will focus on the adolescent's specific habits, it will also be important to involve the caregiver in these strategies.

Therapists should continue to support caregivers in implementing recommendations discussed in the program sessions, and check-in on how caregivers are modeling their own healthy social media use with implementation of the Household Media Use Plan.

Future Directions

The Developing Healthy Social Media Practices intervention has been piloted within two mental health agencies. The program was first piloted with a small group of families to determine general feasibility (e.g., if the clinicians can complete all session components within the allotted time and do so without extensive expertise on media use) and gather informal feedback from clinicians and clients (e.g., if the session topics, examples, content were relevant to adolescents; if the activities were engaging to youth; and if clinicians were able to implement session activities within time frame). The clinicians then provided informal qualitative feedback to the program developers, which was integrated into the session design presented here. The main content changes were to include examples and content relevant to adolescent males' use of social media (e.g., social gaming, online forums, video sharing platforms). A primary concern was if this program can be feasibly implemented by clinicians who are not experts in media use, and this pilot provided evidence that it can be. Additionally, this initial pilot provided support for using the intervention in an online format, as it was used during virtual sessions with adolescents and caregivers. Given this preliminary evidence of feasibility, future research should include a larger-scale pilot study, which can provide quantitative data concerning acceptability and efficacy.

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