

Leveraging Affordances as a Lens: A Systematic Review of Social Media Benefits and Risks for Adolescents

Abdulmalik Alluhidan
Department of Computer Science
Vanderbilt University
Nashville, Tennessee, USA
Institute of Public Administration
Riyadh, Saudi Arabia
abdulmalik.s.alluhidan@vanderbilt.edu

Renkai Ma
School of Information Technology
University of Cincinnati
Cincinnati, Ohio, USA
mark@ucmail.uc.edu

Jinkyung Katie Park
School of Computing
Clemson University
Clemson, South Carolina, USA
jinkyup@clemson.edu

Zainab Agha
Department of Computer Science
San Francisco State University
San Francisco, California, USA
zainabagha@sfsu.edu

Zhijun Yin
Department of Biomedical
Informatics
Vanderbilt University Medical Center
Nashville, Tennessee, USA
zhijun.yin@vanderbilt.edu

Pamela J. Wisniewski
International Computer Science
Institute
Berkeley, California, USA
pwisniewski@icsi.berkeley.edu

Abstract

Although social media use is ubiquitous among adolescents, research often emphasizes benefits and risks without considering the design-based affordances that may influence these experiences. Affordances enable or constrain user behavior and thus provide a valuable lens for promoting positive online engagement. To this end, we developed an affordance-centered framework and systematically coded 66 empirical studies on U.S. adolescents published in the past decade to map how platform features relate to specific user activities, the affordances they instantiate, and associated benefits and risks. For instance, *Discoverability* affordance, driven by algorithmic recommendations, supported *Cognitive* engagement by facilitating learning while heightening exposure to misinformation. *Visibility* affordance enabled *Identity* exploration through ephemeral sharing, lowering performance anxiety but raising post-disclosure regret when content reached hostile viewers. By clarifying how specific affordances facilitate adolescent experiences, our work contributes a design-grounded framework for future research that advances both theoretical understanding and the development of youth-centered interventions.

CCS Concepts

• **Human-centered computing** → **Empirical studies in collaborative and social computing**.

Keywords

Online safety, Social media, Adolescents, Affordances

ACM Reference Format:

Abdulmalik Alluhidan, Renkai Ma, Jinkyung Katie Park, Zainab Agha, Zhijun Yin, and Pamela J. Wisniewski. 2026. Leveraging Affordances as a Lens:



This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

CHI '26, Barcelona, Spain

© 2026 Copyright held by the owner/author(s).

ACM ISBN 979-8-4007-2278-3/26/04

<https://doi.org/10.1145/3772318.3791092>

A Systematic Review of Social Media Benefits and Risks for Adolescents. In *Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems (CHI '26)*, April 13–17, 2026, Barcelona, Spain. ACM, New York, NY, USA, 21 pages. <https://doi.org/10.1145/3772318.3791092>

1 INTRODUCTION

The latest research from Pew Research indicates that social media use is nearly universal among U.S. teenagers, with most using multiple platforms daily [51]. Given this high level of engagement and the fact that adolescence is a complex developmental period marked by identity formation [21], heightened sensitivity to peer feedback [37], and increased exploration of the social world [139], teens may be especially affected by the design of features that facilitate different activities on social media. On one hand, social media offers important benefits, including peer support [7, 66], identity exploration [60, 88], and access to learning resources [33, 159]. On the other hand, it also exposes teens to risks such as cyberbullying [43, 80], negative social comparison [14, 15], and sexual risks [65, 129]. Policymakers [11, 142], parents and researchers [28] have often called for “safer” social media that better protects youth from online harms.

As such, numerous studies, including systematic reviews and meta-analyses, have thus examined the impacts of social media use on young people, focusing on areas such as depression [36], anxiety [116], stress [167], well-being [156], and psychosocial impacts [143]. However, this line of work largely centers on how the use frequency or intensity leads to positive or negative outcomes, which often ignores how the specific platform design components and mechanisms, such as likes, comments, or algorithmic recommendations, drive these outcomes [9, 92]. Understanding how design influences these experiences is important for developing tailored interventions that move beyond simply addressing harmful outcomes (e.g., content removal) and toward addressing the inputs and pathways that may contribute to those outcomes in the first place [152]. Thus, it becomes important to examine teens’ experiences in relation to the specific social media features they use and the

different activities these features enable, which can be systematically studied through the lens of *affordances*, which refers to the perceived possibilities of a system that enable or constrain certain user behaviors [110, 111, 155]. Applying the affordances lens moves the discussion beyond broad risk-and-benefit debates to provide clearer conceptual framing to inform design that reduces harm and supports positive use.

Emerging work within the SIGCHI communities has investigated how some social media design components, such as recommendation systems [26] and private messaging [7, 66], are associated with specific user outcomes, such as the cross-platform spread of harmful content [26], exposure to harassment and sexual solicitations [7], or opportunities for emotional and informational support [66]. However, because this work has largely been examined in separate silos, we still lack a holistic picture of how platform designs are associated with different risks and benefits for youth. A systematic literature review that leverages the affordance lens can address that by helping create a uniform, design-based understanding of youth experiences across platforms. The affordance lens also helps address the lack of design-based interventions identified in prior work [3] by providing a scientific basis for intervention design that aligns required functions and theory-linked constructs with platform capabilities. In doing so, interventions target replicable technological qualities rather than temporary criteria such as platform popularity [103]; if one platform declines or shifts, researchers can select another with similar affordances, preserving validity and generalizability across platforms. Meanwhile, teens' online experiences are uniquely influenced by dominant platform ecosystems [51], cultural differences [113], and the distinct regulatory environment of where they live (e.g., COPPA [34]). To date, the U.S. has driven the majority of empirical research on adolescent online safety. In addition, ongoing debates around the Kids Online Safety Act (KOSA) [1] in the U.S. are actively shaping platform policies, which makes our synthesis especially important at this time. Thus, we chose to focus on the U.S. context for this work. To guide this effort, we ask the following over-arching research questions:

- **RQ1:** *What are the key research trends in the study of adolescent social media use over the past decade in the U.S.?*
- **RQ2:** *Which social media affordances have been analyzed most frequently in these research studies and what teen social media activities do these affordances facilitate?*
- **RQ3:** *How do the benefits and risks associated with different teen social media activities map to these affordances?*

To answer these questions, we conducted a systematic literature review of 66 empirical studies published between 2014 and 2024 on U.S. adolescents' social media use. We identified five central research trends: a strong emphasis on risky content and the normalization of harmful behaviors; teens' strategies for identity and self-presentation; the use of platforms for health and well-being; evolving practices of privacy management; and smaller but important themes related to information seeking, education, and advertising. To answer RQ2 and RQ3, we developed a multi-level conceptual framework of affordances grounded in prior literature to better understand how design relates to adolescents' social media experiences (See Fig. 1). We then systematically coded the 66 empirical studies to outline how platform features relate to specific user

activities, the associated risks and benefits, and both functional and human-centered affordances (See Fig. 3). For instance, our analysis shows that the *Visibility* affordance was often associated with reports of *Identity* experiences by enabling self-presentation and reputation management at the risk of post-publish regret and judgment. Similarly, the *Interactivity* affordance was frequently associated with both *Emotional* and *Social* experiences, providing peer support while amplifying social comparison and unsolicited contact. The *Discoverability* affordance was commonly coupled with *Cognitive* experiences by facilitating learning and perspective broadening, yet it also exposes teens to misinformation. Finally, the *Association* affordance was often associated with *Social* experiences through information curation, although the resulting network visibility increases the risk of unwanted reach. Based on these findings, we discuss affordances as double-edged swords that require youth-centered, context-aware research and design to rebalance benefits and risks. We also outline a forward agenda that emphasizes cross-platform comparisons, multi-method and longitudinal approaches, and attention to how peer norms shape feature use. Lastly, we translate these insights into design directions for safer social media use.

Our study makes these three primary contributions to the SIGCHI and adolescent online safety literature:

- We synthesize the landscape of U.S. adolescent social media research over the past decade, identifying methodological and topical trends and highlighting gaps in how scholars have approached youth social media engagement.
- We develop and operationalize an affordance-centered conceptual framework that maps platform features to user activities, then to functional and human-centered affordances, showing how design elements relate to adolescent behaviors, and offering a structured lens to assess how social media affordances facilitate both opportunities and introduce risks.
- We advance a forward-looking research and design agenda, outlining future work that adopts a spectrum perspective on affordances.

2 BACKGROUND

This section synthesizes prior studies on adolescents' online safety and social media affordances.

2.1 Systematically Understanding Adolescent Safety on Social Media

A growing body of systematic literature reviews (SLRs) synthesize knowledge on online safety (e.g., [131, 134]), and recent work has increasingly focused specifically on adolescents (ages 13-17). This focus is necessary due to the heightened risk and distinct developmental needs of adolescence [143], along with changes in social dynamics [68] and technological skills [153] that shape how young people engage with online environments. For example, prior work shows that as adolescents seek greater autonomy from parents [165], they increasingly turn to peers online for validation [68], advice [130], and emotional support [66]. Researchers have studied specific safety solutions, such as the use of AI to prevent online child sexual abuse [146], trends in educational technologies for youth online safety [48], and how current technology-mediated "nudges"

are primarily reactive, designed to confront youth or facilitate alternate actions during or after a risk has occurred [2]. Meanwhile, online safety research varied widely across cultural contexts [32]. For example, norms common in many Global South settings, including collectivist family structures, gender roles, and cultural taboos, contrasted with the more individualistic, autonomy-focused U.S. context, where online safety had been shaped by distinct regulatory debates that differed from other regions [113]. In addition, platforms serving U.S. teens operate under COPPA [34] rather than the European Union's General Data Protection Regulation (GDPR), which provides more comprehensive data rights protections [132]. Therefore, studies on youth and their social media experiences need to be grounded in the socio-political and cultural contexts in which they are embedded.

Despite this growing attention on the role of social media and online safety in the lives of youth, gaps still remain. For instance, a review of 132 publications found that very few adolescent online safety studies had moved beyond formative evaluations to design and test new safety interventions [125]. Another gap remains in systematically understanding how social media features specifically contribute to the everyday online safety experiences of adolescents. Furthermore, such systematic understanding is needed because the current understanding of teens' safety on social media is relatively fragmented. For example, prior empirical studies focus on how the platforms' content creation and sharing can heighten social comparison and lead to negative self-perception among teens [27, 68]. Other work highlights how private messaging features foster community support [93] or facilitate risky conversations with perpetrators [8]. Taken together, these strands point to a missing link: a systematic synthesis of empirical research on how affordances facilitate the activities that contribute to both beneficial uses and risks of social media. Such an account provides a way to address the inconsistent terminology and shifting feature sets in prior work, which have made comparisons across evolving platforms difficult [49, 136]. Our review fills this gap by using affordances as a conceptual bridge to systematically map platform features to reported teen experiences, enabling clearer, comparable, and auditable mechanisms across studies.

2.2 Adolescents and Social Media Affordances

To address the gap in understanding how social media platforms contribute to online safety, it is necessary to analyze how these platforms enable and constrain adolescents' experiences. The concept of affordances provides a lens for this analysis. Contemporary scholarship takes an affordance as the relational process that mediates between a technology and a user, emerging from their direct interaction [49]. This interaction is consequential for adolescents as they navigate social media every day. For example, on platforms that emphasize real-name identity (e.g., Facebook), users typically curate their self-presentation more carefully, whereas on platforms with minimal identity tethering (e.g., Reddit), they often share sensitive information without fearing personal repercussions [83]. Meanwhile, an adolescent's interpretation of platform designs can lead to challenges. For some youth on the autism spectrum, using a feature like "blocking" on a social connection can cause distress because this action violates the literal meaning of that friendship

[117]. More broadly, adolescents also learn to navigate platform features they perceive as risky. When their attempts fail, however, they often blame themselves for the negative outcomes [86]. The concept of affordances is useful for understanding these dynamics by capturing the specific "action possibilities" that platform designs present to users, which in turn influence teens' online experiences [103].

Prior work argued for using an affordance perspective to study online behavior and guide research [104], which motivated our use of affordances as the organizing lens for this review. For example, Yang and Zhang [169] treated affordances such as visibility and association as measurable affordances and showed how they relate to technology stress and social media fatigue, demonstrating a validated, affordance-based measurement approach. Likewise, Karahanna et al. [73] developed a needs–affordances–features framework that maps social media affordances to specific psychological needs, showing how they can be used to structure theory-driven analyses of why people use social media. In this review, we use an affordance perspective to clarify how particular action possibilities in social media design shape adolescents' experiences and to highlight implications for research and design.

3 Theoretical Framework of Social Media Affordances

Although Gibson defined affordances in ecological psychology as the action possibilities of what the environment offered an individual [59], Norman introduced and popularized the concept within HCI communities, adapting it to refer to the perceived properties of an object that suggested how it could be used [110]. This formulation sometimes led scholars and designers to conflate affordances with features. Norman's notion of perceived affordances was intended to help designers signal how a user should interact with a device, and as the term became standard in HCI and user experience research, the distinction between a material feature and the relational affordance often blurred [136]. As a result, prior work has repeatedly reported that the term is used loosely and inconsistently [25, 133, 136]. In particular, recent work has often broadened the term in practice, labeling concrete features (e.g. notifications [145]) or treating downstream outcomes (e.g., privacy [105]) as affordances.

In this SLR, we respond to these inconsistencies by following Evans et al. [49] in defining social media affordances as relational possibilities for action that arise from the interplay of users, platform features, and context. This definition emphasizes that an affordance enables or constrains action but is neither a feature nor an outcome, providing a way to avoid conflating affordances with something else. Evans et al. [49] further outlined three thresholds for identifying affordances: they should describe possibilities for action rather than features, denote mechanisms that enable outcomes rather than the outcomes themselves, and exhibit variability so that a given affordance can support different actions in different situations. These commitments guided our evaluation of affordances in our conceptual framework. In addition, our framework distinguishes two layers of affordances: *functional affordances* and *human-centered affordances*, as we illustrate in Figure 1 and clarify next.

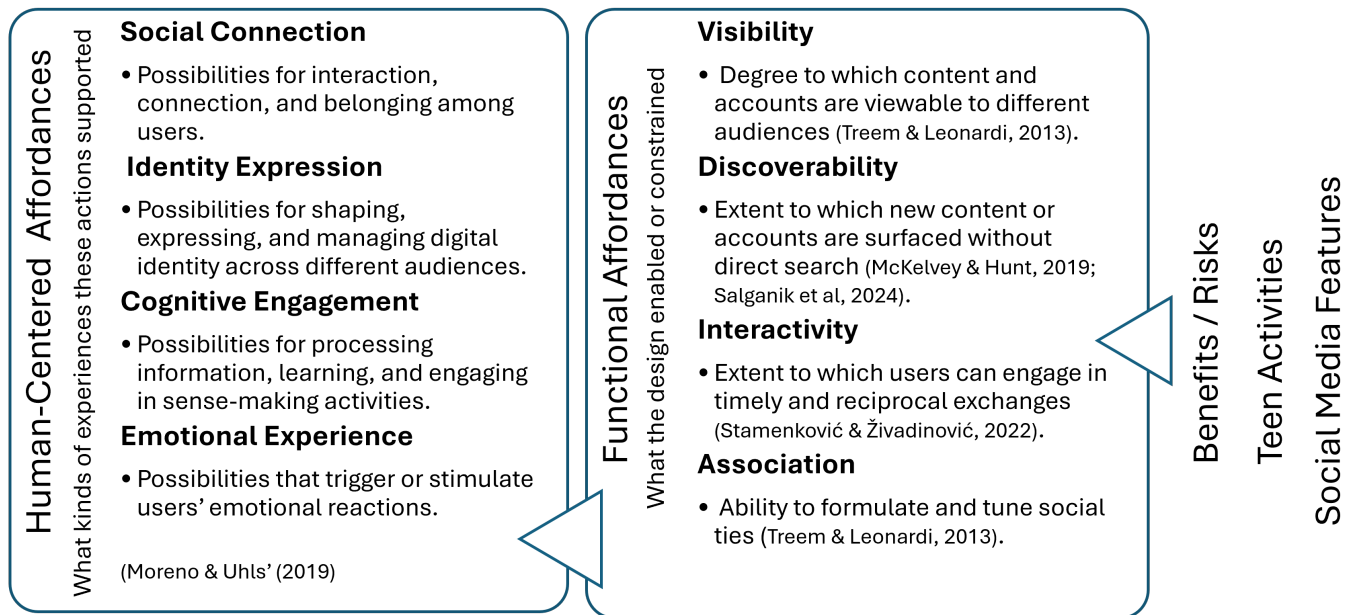


Figure 1: Conceptual Framework of Social Media Affordances.

3.1 Functional Affordances

Functional affordances refer to core platform action possibilities that shape how social media messages are transmitted, encountered, or saved [103]. These affordances describe patterns of communication and exposure rather than specific content or outcomes. Guided by the conceptual thresholds described above [49], we focus on a subset of functional affordances that are central for understanding how platforms enable or constrain online interaction. Similar to other affordance-based frameworks for social media [44, 117, 133], we do not attempt to enumerate every possible functional affordance. Instead, we focus on four functional affordances that repeatedly appear in prior HCI and social media studies [136, 137, 147, 155], and are present across the major platforms used by adolescents today, including *Discoverability*, *Visibility*, *Interactivity*, and *Association*. Taken together, these four functional affordances capture key ways that social media platforms structured communication: what content could be encountered, who could see it, how people could interact around it, and how social ties could be formed and managed online. Therefore, they are valuable in providing a vocabulary for reasoning about how design decisions at the platform level might shape adolescents' opportunities and constraints online, independent of any specific outcome. In this review, *Discoverability* refers to the extent to which new content or accounts are surfaced without direct search and is often operationalized through recommendation systems [98, 137]. *Visibility* refers to the degree to which content and accounts are viewable to different audiences and is often operationalized through profile and audience controls [155]. *Interactivity* refers to the timeliness and reciprocity of exchange and is operationalized through feedback and messaging features

[147]. *Association* refers to the formation and tuning of ties and is operationalized through follow, friend, subscribe, and related mechanisms [155].

3.2 Human-centered Affordances

While functional affordances described how platforms make communication possibilities visible at the design level, they did not fully capture how adolescents experienced these systems. Affordances are not solely platform-level action possibilities; they also shape how users feel, connect, express themselves, and make sense of interactions. Building on Moreno and Uhls' adolescent lens [104], which situated social media use within youth-specific developmental tasks, we treated experiential dimensions as a separate but conceptually linked layer of *human-centered affordances*. These affordances describe how interactions with platform functional affordances could support or hinder key adolescent developmental experiences, including forming relationships, building identity, processing information, and managing emotions. Grounded in Moreno and Uhls' adolescent lens [104], we utilized four human-centered affordances: *Social*, *Identity*, *Emotional*, and *Cognitive*. Moreno and Uhls [104] argue that these affordances map directly onto core developmental tasks of adolescence. *Social* affordances refer to possibilities for interaction, connection, and belonging; *Identity* affordances refer to possibilities for shaping, expressing, and managing digital identity across audiences; *Cognitive* affordances refer to possibilities for processing information, learning, and engaging in sense-making; and *Emotional* affordances refer to possibilities that heighten or alleviate emotional experiences [104]. Focusing on these four affordances, therefore, centers our review on how social media features can be associated with the primary social, identity, emotional, and cognitive challenges of adolescence.

In our framework, we situate these theoretically-driven two layers within a five-step mapping that progresses from platform features, through user activities and their benefits and risks, to functional and, ultimately, human-centered affordances as illustrated in Fig. 1. This layered view clarifies how a small design change may cascade through the system. For example, adding a Close Friends story filter introduces a new feature, reframes an activity such as content sharing, has the potential to limit *Visibility* at the *functional* layer, and may have implications for how adolescents manage their *Identity* at the *human-centered* layer. Guided by this model, our review asked not only which affordances were present, but also how their combined influence may be associated with benefits and risks for teens. Section 4.2 provides further operational details about the coding process, and Figure 3 shows our multi-layered coding process.

4 METHODS

Below, we explain the methodologies we applied in our systematic review of the literature and qualitative synthesis of the articles in our dataset.

4.1 Systematic Literature Scoping and Selection Process

We used the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines [102], widely adopted by prior HCI researchers (e.g., [35, 91, 121]), to analyze prior literature to answer our research questions. We first established the inclusion criteria for our SLR and conducted the review following PRISMA's four stages: (1) identification, which involved searching academic databases for literature using relevant keywords; (2) screening, where we reviewed the titles, keywords, and abstracts of identified studies, leading to forward and backward snowball sampling; (3) eligibility, involving a full-text review of the screened studies to exclude those that did not meet our inclusion criteria; and (4) inclusion, where we extracted and analyzed data from studies that satisfied the criteria. The inclusion criteria are the following eight points:

- (1) The articles must be written in English to align with the language proficiency of the authors.
- (2) The articles must be peer-reviewed published work. Journal articles and conference proceedings were both included.
- (3) Papers should have been published within the last 10 years, specifically between January 1, 2014, and December 15, 2024, the date our data collection concluded. We focused on the last 10 years to capture teens' contemporary social media experiences on both mature and emerging platforms.
- (4) The articles should not be meta-analysis work (e.g., literature reviews).
- (5) The articles should discuss users' experiences on popular social media platforms in the U.S.. We relied on the latest report from Pew Research Center [29] in determining the most popular social media platforms (see details in section 4.1.1) among U.S. teens. Any articles that did not mention any of these platforms or discussed social media generally were excluded.
- (6) The articles should focus on empirical data collected from teens aged 13–17 years. The rationale for selecting this specific age group lies in its unique position: while teens are still legally minors, they are not afforded the same protections as younger children under laws like the U.S. Children's Online Privacy Protection Act (COPPA) [34].
- (7) The articles should focus on teens residing in the United States. This decision is influenced by the current location of all co-authors and the distinctive socio-cultural and regulatory environment that shape the online experiences of American teens.
- (8) The articles should implicitly or explicitly, mention how teens interact with the affordances of certain social media platforms.

4.1.1 Identification. Following PRISMA guidelines, we first identified three databases (i.e., ACM Digital Library, IEEE Xplore Digital Library, and ScienceDirect), for their coverage in computational and social science research. Our search string consisted of keywords at the intersection of teens and social media, used for searching across all databases: ("adolescents" OR "teens" OR "teenagers" OR "youth") AND ("social media" OR "YouTube" OR "Facebook" OR "Twitter" OR "Instagram" OR "Snapchat" OR "TikTok" OR "WhatsApp" OR "Reddit"). This search conducted on December 15, 2024, yielded 2,391 papers. We then applied filters to meet our first, second, and third inclusion criteria, excluding papers written in languages other than English ($n = 35$), not published as full-length papers ($n = 615$), and published before 2014 ($n = 70$). Additionally, we excluded duplicate results ($n = 85$) caused by repeated searches on databases that did not allow the inclusion of many Boolean operators (i.e., ScienceDirect). After these, the final dataset resulted in 1,586 articles to move forward to the screening phase.

4.1.2 Screening. In this phase, the first and second researchers independently reviewed the titles, keywords, and abstracts of all 1,586 papers, reading the full text in times of uncertainty. In this phase, the next two inclusion criteria were applied sequentially. First, the authors examined whether the papers were meta-analyses (e.g., literature reviews): a total of 28 papers were excluded, leaving 1,558 articles. Next, the researchers applied the inclusion criteria that focused on user experiences with popular social media platforms: they excluded papers that did not feature a context of user interaction on these platforms ($n = 626$) and papers that used social media solely for recruitment purposes ($n = 109$). This resulted in leaving 823 articles for further screening. The last step excluded papers that did not focus on empirical data collected from teens. However, studies including other age groups alongside teens were included if at least 25% of the participants were within the 13–17 age range. In cases where the age distribution was unclear, we excluded papers in which non-teens outnumbered teens. This led to the exclusion of 339 papers that focused on younger children, adults, or general users to conclude PRISMA's screening stage by identifying 484 relevant articles.

Forward and backward snowball sampling. Before proceeding to the eligibility stage (full-text review), we conducted forward and backward snowball sampling to explore how the 484 papers were connected to prior literature and whether they had influenced

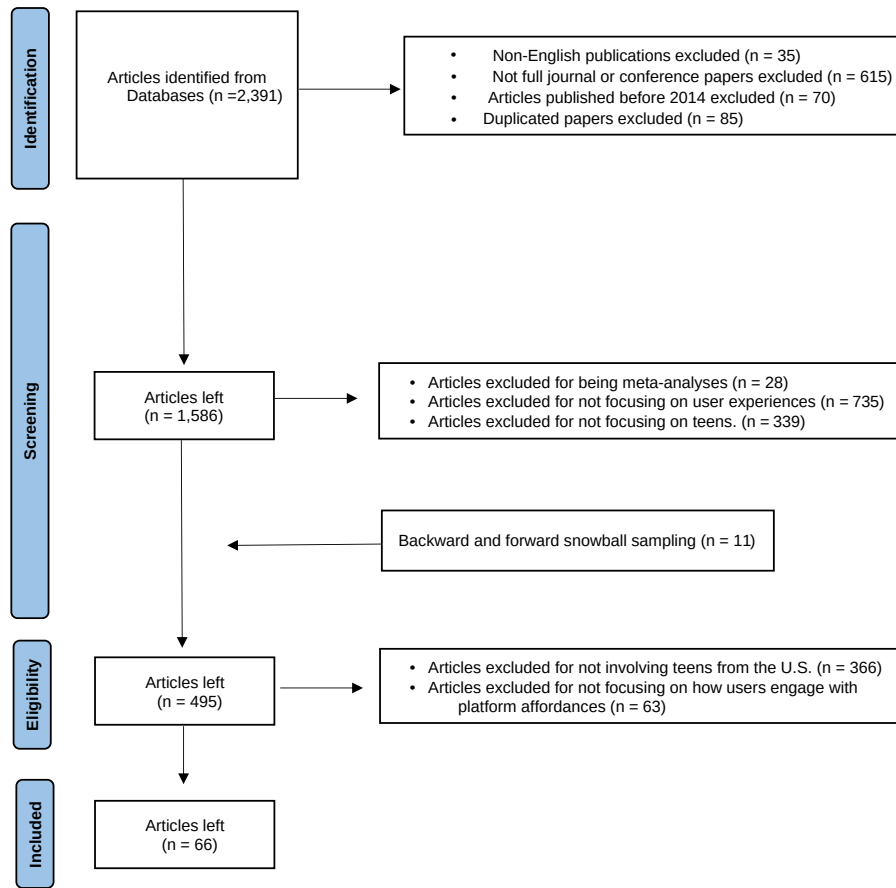


Figure 2: PRISMA Diagram.

subsequent studies. We followed the iterative citation search guidelines proposed by Wohlin [166] and screened article titles, publication venues, and author information to assess their alignment with all of our inclusion criteria: for the forward search, we used the “cited by XXX” feature in Google Scholar to identify studies that had cited the 484 papers. For the backward search, we reviewed the reference lists of these papers to identify relevant studies they had cited. This resulted in the identification of 11 additional papers, bringing the total to 495 papers into the PRISMA eligibility stage.

4.1.3 Eligibility. During this stage, the authors carefully reviewed all papers’ full text to ensure they met the inclusion criteria. The methods sections were examined to verify participant information, leading to the exclusion of studies involving non-U.S. teens. This process eliminated 366 papers, leaving 142 articles. Lastly, papers that treated social media as a single entity without platform-specific engagement were excluded, removing an additional 63 articles and leaving 66 papers advanced to the final PRISMA stage, as illustrated in Figure 2.

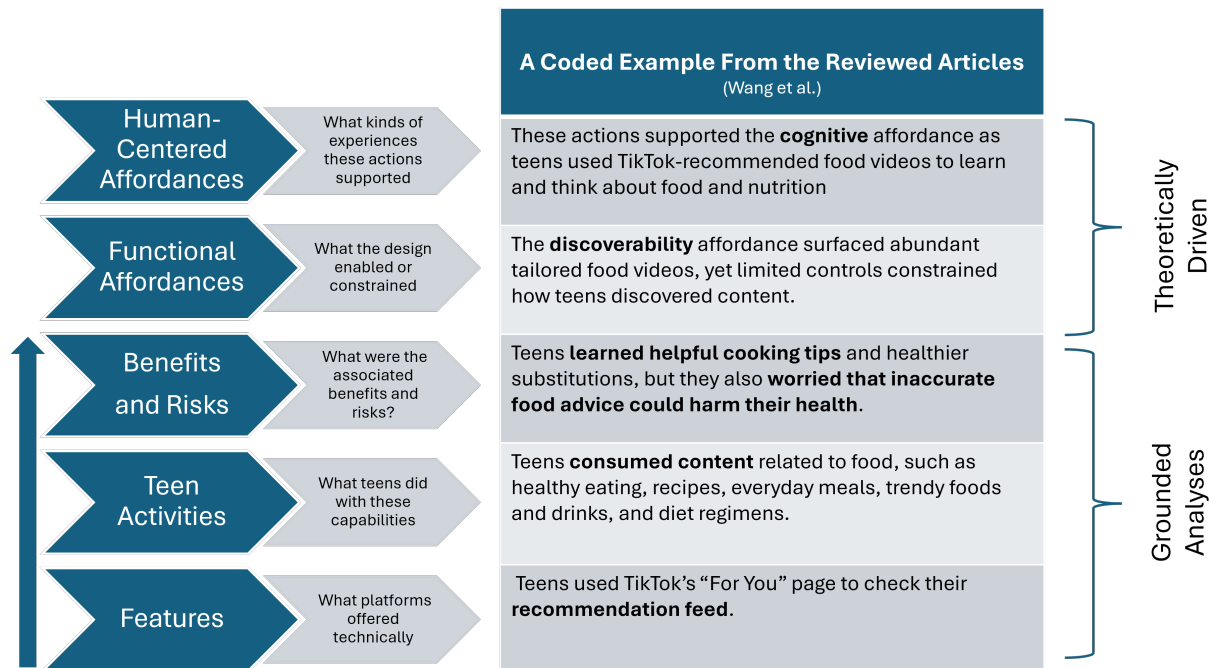
4.1.4 Inclusion. After completing the eligibility stage, a total of 66 studies were included in the final dataset for further analysis to conclude the inclusion phase.

4.2 Qualitative Data Analysis Approach

Before conducting data analysis, the research team extracted key information from each study, including author names, publication venues, article titles, publication years, research methods, social media platforms examined, and research themes. This process enabled us to identify major trends in adolescent social media research over the past decade to address RQ1. Next, to answer our RQ2 and RQ3, we looked at the definitions of affordances in the literature [49, 136] and several influential frameworks [103, 104, 155] to develop our own framework (Section 3) and coding process (See Figure 3). The coding procedure involved the first author as a single primary coder who regularly met with the last author and the larger research team for discussion and refinement, which is well-suited for consensus-driven thematic analysis [23] and a common and rigorous practice shown in prior HCI work [57, 71, 120]. To avoid conflating affordances with features or outcomes in this study, we explicitly distinguished features, activities, benefits and risks, and affordances during our coding process. Guided by our affordances framework in Figure 1 and our multi-layered coding process in Figure 3, the first author then systematically coded the articles using a hybrid approach: inductive bottom-up coding for features,

Table 1: Publication venues by topic area. N indicates the number of articles.

Topic area	Venues
Human-Computer Interaction and Social Computing (45%, n = 30)	CHI (n = 13) [6, 7, 16, 31, 33, 42, 56, 66, 68, 88, 97, 122, 126]; CSCW (n = 11) [9, 10, 55, 61, 69, 70, 124, 160, 164, 171, 173]; IDC (n = 4) [81, 99, 159, 163]; GROUP (n = 1) [54]; MobileHCI (n = 1) [87]
Public Health (32%, n = 21)	Journal of Adolescent Health (n = 6) [12, 62, 63, 100, 106, 108]; JMIR Public Health and Surveillance (n = 3) [89, 114, 148]; Preventive Medicine Reports (n = 3) [94, 141, 157]; JMIR Formative Research (n = 2) [82, 90]; Academic Pediatrics (n = 1) [78]; JMIR Diabetes (n = 1) [93]; Journal of Medical Internet Research (n = 1) [20]; Drug and Alcohol Dependence (n = 1) [154]; JMIR Pediatrics and Parenting (n = 1) [4]; JMIR Research Protocols (n = 1) [119]; Social Science & Medicine (n = 1) [138]
Communication, Media, and Information Sciences (12%, n = 8)	Computers in Human Behavior (n = 5) [53, 72, 127, 162, 168]; Telematics and Informatics (n = 1) [172]; Computers & Education (n = 1) [75]; SMSociety (n = 1) [41]
Psychology and Human Development (6%, n = 4)	Body Image (n = 2) [27, 135]; Journal of Adolescence (n = 1) [149]; The Journal of Sex Research (n = 1) [123]
Other (5%, n = 3)	Children and Youth Services Review (n = 2) [45, 107]; International Journal of Intercultural Relations (n = 1) [18]

**Figure 3: Multi-Layered Coding Process for Mapping Affordances to Social Media Experiences. Connections between layers illustrate observed associations from our review, not causal pathways. The example article used is drawn from Wang et al. [159].**

activities, benefits and risks, and deductive top-down coding for affordances, as follows:

Step 1: Feature identification. For each study, we identified and coded the specific platform features adolescents interacted with (e.g., likes, comments, direct messages).

Step 2: Activity labeling. We then grouped those feature uses into higher-level activities based on their purpose of use, such as consuming content, sharing content, engagement and feedback, private messaging, privacy control, network building, and profile management. Table 2 lists activities and frequencies.

Step 3: Benefits and risks associations. We next coded benefits and risks reported in the articles regarding how the above activities shaped adolescent experiences. See examples in Table 3.

Step 4: Functional affordance assignment. We started this step with open coding to identify how the platform design enabled or constrained teen activities reported in the articles. We then conducted focused coding to map the identified action to a candidate functional affordance, applying the three thresholds described in Section 3. For example, when teens used audience settings to control who could see their posts, we mapped this action to the functional affordance of *Visibility*, referring to the degree to which content and accounts were viewable to different audiences. In our analysis, we identified a broader set of functional affordances than those highlighted in this study, such as *Editability*, *Persistence*, and *Ephemerality*. However, due to their low frequencies ($n < 5$) in the included articles, we excluded those affordances from our review and only reported our most common affordances as shown in Table 2.

Step 5: Human-centered affordance coding. We then coded for the type of adolescents' lived experiences reported in the articles we analyzed using Moreno and Uhls' lenses [104] across social, identity, emotional, and cognitive affordances. To avoid forcing the data, we allowed emergent codes and kept an open "other" bucket during coding. However, all teen experiences were mapped to the four lenses. As a sensitivity check, we re-coded a 10% sample without domain prompts and then mapped codes to lenses; convergence suggested the framework did not suppress novel experiences. Beyond the main lenses, a small number of secondary codes appeared (e.g., *Autonomy*, *Accessibility*) across the coded experiences. However, given their low frequency ($n = 4$) and their status as secondary rather than primary lenses, we did not report them as separate categories in this review.

Lastly, we integrated the results of these steps to clarify how specific functional affordances correspond to distinct patterns of adolescent engagement. This synthesis allowed us to situate previously studied risks and benefits within a structured, layered framework that links platform features to users' experiences.

5 RESULTS

5.1 Key Research Trends in The Current Literature (RQ1)

Across the ten-year span in the 66 peer-reviewed empirical studies published between 2014 and 2024, there was a discernible upward trend in publication volume, peaking in 2024 with 11 publications, which represents approximately 17% of the total sample. This rise corresponded with the increasing concerns around teen safety, digital well-being, and the rapid emergence of contemporary social media platforms. Publication venues also varied by topic area, with HCI and social computing venues being the most common, followed by public health and communication and information science venues. Table 1 lists all publication venues for the included articles, organized by topic area.

5.1.1 Platforms Popular among Teens. In terms of the types of platforms that received scholarly attention, Instagram was the most commonly examined in 56% ($n = 38$) of the studies, followed by Facebook (37%, $n = 25$), TikTok (22%, $n = 15$), Snapchat (19%, $n = 13$), YouTube (13%, $n = 9$), Twitter/X (9%, $n = 6$), and WhatsApp (4%, $n = 3$), with Reddit and Vine mentioned only once each (1%). The growing prominence of TikTok in recent years is notable, appearing in six studies from 2024 alone [9, 42, 63, 97, 138, 160]. Although a few studies explored adolescents' experiences across multiple platforms, the majority (59%, $n = 39$) focused on a single platform, suggesting a dominant trend toward platform-specific inquiry rather than comparative analysis. On average, studies addressed between one and three platforms.

5.1.2 Data Collection and Methodological Approaches. Data collection techniques varied considerably in the 66 studies we reviewed. Surveys were the most commonly used method, accounting for 37% of all methodological instances ($n = 35$). Digital trace data, such as logs of online activity, was the second most frequent technique (25%, $n = 23$), suggesting increased scholarly attention to ecologically valid, behavior-based measures. Interviews (21%, $n = 20$) and focus groups (7%, $n = 7$) were also prevalent, often employed to

capture rich, first-person accounts of teens' experiences online. Less commonly used methods included observational strategies (3%, $n = 3$), ecological momentary assessment (EMA) (2%, $n = 2$), diary studies (1%, $n = 1$), hypothetical scenarios (1%, $n = 1$), online experiments (1%, $n = 1$), and participatory workshops (1%, $n = 1$), reflecting a growing but still limited methodological diversification in the field. The studies also employed a wide range of methodological approaches. Qualitative designs were the most frequently used, appearing in 38% of studies ($n = 25$), followed by mixed-methods approaches (32%, $n = 21$) and quantitative designs (30%, $n = 20$). This distribution highlights a field largely oriented toward exploratory, experience-based inquiry, with a notable portion of studies also integrating numerical and behavioral data. Lastly, participants' sample sizes varied widely across studies (min= 6, max= 20,112). The median sample size was around 133, while the mean was much higher at 832, indicating that a few large studies skewed the average upward and that most studies had modest sample sizes.

5.1.3 Key Thematic Trends in Adolescent Social Media Use. Thematically, the reviewed literature reflects a strong emphasis on adolescents' exposure to risky content, efforts to manage their health and well-being through social media, and strategies for navigating online identity and self-presentation. The largest share (24%, $n = 16$) examined risky content and interactions, showing how social media normalizes harmful behaviors, particularly substance use [94, 107, 108, 148, 154, 157]. Nearly as many studies (23%, $n = 15$) focused on identity curation, documenting how teens balanced self-expression, validation, and comfort through practices such as content creation and feed-shaping [16, 68, 81, 97, 99, 122, 138, 149, 159, 160, 171]. A similar proportion (22%, $n = 14$) examined health and well-being, highlighting the potential of social-media-delivered interventions and the risks of misinformation, especially on TikTok [4, 42, 63, 82, 119, 141]. Privacy management was addressed in 11% ($n = 7$) of studies, focusing on disclosure practices, secondary accounts, follower curation, and protective tactics [70, 164, 168, 173]. Information-seeking behaviors appeared in 9% ($n = 6$), showing how teens selected platforms, weighed credibility, and cross-checked answers [54, 55, 69, 123, 163]. Educational uses accounted for 8% ($n = 5$), describing classroom extensions through collaborative assignments, mentorship, and portfolios [18, 41, 75, 124, 126]. Finally, 3% ($n = 3$) examined advertising and marketing, showing that adolescents engaged with socially endorsed or interactive promotions but resisted intrusive ads [20, 89, 172].

5.2 Common Social Media Affordances Explored in Prior Research (RQ2)

This section synthesizes common social media affordances identified in prior work in relation to teen activities. We surface the dominant functional and human-centered affordances and highlight their most frequent pairings across the reviewed studies. Table 2 presents the codebook for RQ2, detailing the primary social media activities examined in the literature along with the most common functional and human-centered affordances for each activity.

5.2.1 Content Consumption: From Discoverability to Cognitive Engagement. The largest share of activities discussed in the literature

Table 2: Most common functional and human-centered affordances by activity (RQ2).
N indicates the number of activities coded across all reviewed studies (N = 121).

Activity	Most Common Functional Affordance	Most Common Human-centered Affordance
Consuming Content (25%, N = 31)	Discoverability (35%, N = 11)	Cognitive (71%, N = 22)
Content Sharing (19%, N = 23)	Visibility (48%, N = 11)	Identity (44%, N = 10)
Engagement and Feedback (19%, N = 23)	Interactivity (61%, N = 14)	Emotional (39%, N = 9)
Private Messaging (16%, N = 19)	Interactivity (90%, N = 17)	Social (84%, N = 16)
Privacy Controls (7%, N = 9)	Visibility (67%, N = 6)	Identity (78%, N = 7)
Network Building (7%, N = 8)	Association (50%, N = 4)	Social (63%, N = 5)
Profile Management (7%, N = 8)	Visibility (75%, N = 6)	Identity (88%, N = 7)

focused on the various ways in which adolescents consumed content on social media platforms (25%, $n = 31$). At the platform level, the key functional affordance identified in this context, as shown in Table 2, was *Discoverability*, which accounted for 35% ($n = 11$) of all content-consumption activities, shaping how adolescents encountered content across platforms. *Discoverability* was primarily enabled through features, such as feed algorithms and personalized recommendations, allowing adolescents to access a wide range of content beyond what they might have actively sought [4, 97, 159]. For example, Charmaraman and Delcourt [31] conducted a workshop with middle schoolers and found that adolescents were drawn to TikTok's rapid, algorithm-driven stream of varied videos. By contrast, Goray and Schoenebeck [61] reported from interviews with youth that they were aware that algorithms played a central role in curating what they saw on platforms like YouTube and TikTok. At the same time, the same recommendation engines that surfaced useful content also amplified misinformation, poor-quality advice, or extremist messages [4, 42, 159].

As shown in Table 2, These content-consumption activities were most often associated with *Cognitive* human-centered affordance (71%, $n = 22$), capturing how youth make sense of and interact with the content they found. Features like algorithmic feeds and personalized recommendations appeared to support content consumption through the functional affordance of *Discoverability*, which in turn may have given rise to *Cognitive* experiences like learning, reflection, and perspective-taking. Across the reviewed studies, *Cognitive* affordance appeared to play a notable role in supporting adolescents to acquire new knowledge, gain practical skills, broaden their perspectives, and reflect on social issues [4, 33, 159]. For example, Alatorre et al. [4] examined how adolescents acquire new knowledge through content consumption on TikTok and Instagram, and they found that participants reported learning new health-related facts from both peer-generated and professional content.

5.2.2 Content Sharing: From Visibility to Identity Management. The literature has also explored the different ways adolescents share various types of content on social media platforms (19%, $n = 23$). The functional affordance of *Visibility* appeared to play a pivotal role across the studies discussing content sharing (48%, $n = 11$). Features such as public posting, live streaming, and algorithm-driven recommendations enabled adolescents to broadcast their self-presentations to close connections and the public, creating opportunities for validation, social interaction, and creative engagement through audience responses [54, 55, 88]. For instance, Luria

and Foulds [88] conducted an eight-day diary study with teens and found that ephemeral sharing on Instagram Stories offered a space for experimenting and trying new aspects of the self. Participants valued shorter-lived content (6–12 hours) because it reduced exposure to wider audiences and made it easier to share personal, silly, or risky material without long-term consequences. Meanwhile, sharing with a broader audience meant personal disclosures and vulnerable posts could be viewed by unintended or hostile recipients, thereby increasing chances of cyberbullying, harassment, and social exclusion [45, 72, 168]. For example, Elsaesser et al. [45] found that small-scale posts could spiral once shared more widely.

Among the various experiences of content sharing, *Identity* expression was the most prominent human-centered affordance identified, representing 44% ($n = 10$). Across the reviewed studies, identity affordance emerged as central to how teens engaged in creating posts, stories, and videos as a means of self-expression, identity experimentation, and audience interaction [72, 87, 88, 171]. This involved not only sharing curated versions of themselves but also testing out different aspects of their identity. For example, Yarosh et al. [171] demonstrated how content creation on platforms like YouTube became a deliberate identity work, while Jordan et al. [72] highlighted how adolescents used social media as a perceived safe space for navigating identity-related challenges and practicing emotionally honest self-disclosure.

5.2.3 Engagement and Feedback: From Interactivity to Emotional Experiences. Research has also explored how adolescents use social media to engage with others and provide feedback (19%, $n = 23$). The functional affordance playing a key role in youth engagement and feedback on social media we identified was *Interactivity* accounting for 61%, ($n = 14$). It enabled teens to both convey and receive signals in ways that made their social connections more responsive and seemingly tangible [31, 68, 160]. For example, Wang et al. [160] analyzed viral food-related content and showed how likes and quick reactions provided recognition, motivating teens to experiment with recipes and share their own creations.

However, sometimes the quantifiable and public nature of these interactions also introduced emotional challenges. Likes and comments often turned engagement metrics into a source of social comparison and pressure [9, 27, 78]; many teens tied higher engagement to perceptions of social worth and felt distress when posts did not elicit comparable responses [9, 68]. In addition, negative interactions, such as hurtful comments, deepened these risks by exposing adolescents to embarrassment, conflict, and emotional

harm [31, 45]. As Elsaesser et al. [45] noted, emotionally charged exchanges could quickly draw in wider audiences, intensifying interpersonal tensions. The dynamics of interactivity were not confined to friendships or peer groups; in romantic relationships, even subtle engagement behaviors, such as a partner liking someone else's post, could trigger jealousy and upset, sometimes escalating into digital dating abuse like monitoring, controlling, or confronting a partner [127].

Within the engagement and feedback activities, the *Emotional* affordance was observed as the most prominent human-centered affordance (39%, ($n = 9$), influencing whether teens felt acknowledged, supported, or exposed in digital spaces [31, 68, 78, 160]. Positive engagement helped adolescents feel emotionally affirmed, fostering a sense of social presence and belonging [31, 68]. For example, Jang et al. [68] observed how adolescents' online interactions sustained social ties, while Charmaraman et al. [31] reported that affirming responses bolstered teens' confidence and encouraged further participation.

5.2.4 Private Messaging: From Interactivity to Social Connection. Studies have also examined adolescents' use of social media private messaging (19%, $n = 23$) where the most common functional affordance was *Interactivity*, representing 90% ($n = 17$) of all private messaging activities. The *Interactivity* affordance may have governed the responsiveness and direct engagement between users within the private messaging spaces and allowed for reciprocal exchanges that made it easier for adolescents to offer and receive advice, provide emotional reassurance, and maintain ongoing conversations that deepened social bonds [7, 10, 66]. These features appeared to structure the private-messaging activity via the interactivity affordance, making exchanges feel synchronous, directed, and trackable. For example, Yoo et al. [66] studied how teens used Instagram Direct Messages to disclose personal struggles and seek support from peers, finding that private messaging not only facilitated candid sharing but also created a sense of closeness through timely and empathetic responses.

Private messaging activities mostly grew into social experiences for adolescents, leveraging the *Social* affordance, which comprises 84% ($n = 16$) of all such activities. Teens used the one-to-few architecture of private messaging to share sensitive stories, vent frustrations, and exchange encouragement without the gaze of a public audience [7, 31, 66]. In small group chats, the *Social* affordance consolidated into micro-communities where peers swapped coping strategies, coordinated goals, and reinforced a sense of belonging [10, 90, 93]. For instance, Lyu et al. studied Instagram-based cessation groups and found that small, mentor-guided group DMs leveraged the social affordance to sustain rapport, mutual encouragement, with participants preferring intimate groups and empathetic outreach [90].

5.2.5 Privacy Controls: From Visibility to Identity Management. Few studies (7%, $n = 9$) have explored how adolescents use social media privacy controls. The key functional affordance at play when youth engage with privacy control activities was *Visibility*, representing 67% ($n = 6$). Through features like audience settings, location sharing toggles, blocking tools, and similar controls, teens decide who can see each post, story, or profile detail [56, 70, 122, 173]. These

features may structure the privacy-control activity via the *Visibility* affordance by determining who could view, contact, or find teens across spaces. When used well, these settings let adolescents share personal updates with friends, keep adults at a distance, and delete or hide posts that fail to attract positive feedback [68, 122]. Yet the presence of adults, parental oversharing, skepticism about data collection practices, and gaps in digital literacy often undermined teens' efforts to maintain meaningful control over their visibility [9, 53, 61, 122]. For example, Pater et al. [122] studied 179 middle-school adolescents over four years and found that as parents migrated onto Facebook, teens increasingly used audience settings—and even maintained separate “family” and “friends” accounts—to restrict who could view photos and updates, demonstrating how visibility controls were mobilized to manage audiences.

Table 2 shows that *Identity* affordance has dominated privacy-control experiences (78%, $n = 7$), which can help adolescents shape how they present themselves [122, 173], set boundaries [56, 70], and decide which “version” of themselves each audience will see [122, 173]. For example, Zhao et al. [173] examined how teens configure Instagram's audience controls (e.g., private accounts, close friends, secondary accounts) and found that these tools let youth share a more authentic self with trusted ties while maintaining a polished persona for wider audiences. Building on this, Jia et al. [70] characterized privacy management as iterative identity work: teens learned from outcomes and refined who could view or respond, restricting to chosen groups or archiving posts to keep past and future content aligned with the image they intended to project.

5.2.6 Network Building: From Association to Social Connection. Only a few studies (7%, $n = 8$) examined how adolescents built online networks. The dominant functional affordance was *Association*, the platform features that let teens follow, friend, and track followers counts, which accounted for 50% ($n = 4$). Through these features, adolescents decide who enters or leaves their digital circles, shaping both the people they can reach and the posts that appear in their feeds [69, 160, 173]. When used thoughtfully, the association affordance helped teens grow supportive peer groups [160, 173], align their networks with personal interests [69, 173], and influence algorithmic recommendations [160]. For example, Wang et al. [160] interviewed teens about their experiences with TikTok videos and found they steered recommendations by following or unfollowing creators and by saving, rather than liking, clips to shape their future feeds. Yet, following unknown accounts or pursuing follower counts, with the help of bot accounts, sometimes brings unwanted contact and privacy threats [173]. For instance, Landesman et al. [81] studied teens' moment-by-moment Instagram use and found that when a mix of irrelevant or negative posts appeared, teens managed their feeds by avoiding that content, limiting notifications, and using controls such as unfollow, hide, block, and report to remove unwanted posts and accounts.

Network-building activities were primarily associated with the *Social* affordance, which accounted for 63% ($n = 5$) of all network-building activities. By choosing whom to follow or unfollow, teens strengthen friendships and manage their social capital by curating who they can draw on for information and opportunities, and to align their networks with evolving interests and goals [69, 82, 114, 149]. Also, curating follow lists also nurtures a sense of belonging

[82], filters information they find valuable [69], and keeps everyday peer exchanges constructive [114].

5.2.7 Profile Management: From Visibility to Identity Expression. Lastly, a few studies (7%, $n = 8$) have explored how adolescents engage in profile management. The main functional affordance observed in this domain was the *Visibility* affordance, which represents 75% ($n = 6$) of all profile management activities. The *Visibility* affordance was operationalized through features such as bio descriptions, secondary accounts, and profile customization, enabling adolescents to regulate the extent to which their self-presentation was publicly accessible or selectively shared [56, 122, 173]. For example, Pater et al. [122] observed that as new audiences (e.g., parents) enter their networks, adolescents adjust profile content and tone.

Within the profile management context, these experiences appeared to afford an *Identity* related experience, which accounts for 75% ($n = 6$), as they showed how adolescents use social media to shape, express, and negotiate their self-presentation. Adolescents curated bios, usernames, and profile aesthetics to advertise themselves, signal belonging, or foster popularity, while simultaneously using alternative or “finsta” accounts as safer spaces for candid and playful self-representation without fear of judgment [41, 68, 122].

5.3 Mapping Benefits and Risks to Teen Social Media Activities and Affordances (RQ3)

In this section, we introduce in greater detail how each of the most common social media activities and the dominant affordances identified in RQ2 are associated with certain benefits or risks, depending on how teens engage with the activity and its key affordances. The activity-based grouping serves as the structure for the following sections. Table 3 presents the codebook for RQ3, describing the main features of each activity, and provides illustrative examples of the most prominent benefits and risks in light of the activities’ most common affordances.

5.3.1 Consuming Content: Teens Gained Knowledge but Faced Misinformation. As discussed in the prior section, adolescents’ content-consumption experiences were associated with the functional affordance of *Discoverability* and the *Cognitive* human-centered affordance. Together, these affordances shaped benefits and risks experienced by teens, depending on context. On the positive side, content consumption appear to provide adolescents with valuable information, practical skills, and broader perspectives [4, 9, 16, 33, 42, 100, 126, 159, 160]. For example, Alatorre et al. [4] found that adolescents favored TikTok and Instagram for short videos from peers and health professionals, which supported engagement with health information through tips and interactive formats like Instagram Live.

Content consumption also appeared to support social and emotional well-being [63, 78, 138]. Kline et al. [78] found that for adolescents experiencing suicidal thoughts, social media reduced isolation and provided distraction from distress. Sanchez et al. [138] reported similar effects for stress and boredom, while Hill et al. [63] showed that social media provided relational information to support decision-making, particularly in sexual health.

On the other hand, though the affordance of *Discoverability*, content consumption also appeared to pose risks, including fears of misinformation shaping choices [4, 42, 159], concerns about the negative effects of overexposure on well-being and teen behavior [9, 33, 63, 78], and discomfort with overly personalized content and privacy intrusions [61, 97]. These drawbacks stemmed from the same discoverability–cognitive pathway: the engine that surfaced useful tips could just as easily deliver misinformation or distressing material. For instance, Dewan et al. [42] reported frequent encounters with health misinformation on TikTok and Instagram, raising further concerns about credibility. As a result, many teens felt the need to double-check information by consulting more trusted sources such as Google to mitigate the risks of relying on unverified advice [4, 42].

Excessive exposure also had the potential to carry emotional and behavioral risks. Choi et al. [33] uncovered that repeated algorithmic surfacing of sociopolitical content left some teens emotionally exhausted. Alluhidan et al. [9] reported that excessive time on social media disrupted time management, reducing sleep quality and academic focus. Kline et al. [78] documented psychological effects, including social comparison, feelings of inadequacy, loneliness, with some participants describing suicidal ideation and failed attempts to seek online support.

5.3.2 Content Sharing: Teens Expressed Themselves but Faced Scrutiny and Harmful Exposure. Overall, content sharing appeared to be associated with the platforms’ *Visibility* affordance, who can see a post, and the *Identity* affordance—how teens construct a sense of self. These two affordances may contribute to both benefits and risks depending on how adolescents use them and the context in which they post. On the positive side, content sharing offered spaces for self-expression [9, 16, 72, 78, 87, 88, 123, 171]. By leveraging visibility to reach chosen audiences, teens often used social media as an active tool for shaping and experimenting with how they wished to be seen. Yarosh et al. [171] showed that content creation on YouTube, where youth presented versions of themselves to peers and broader audiences. Similarly, Jordan et al. [72] found that platforms like Facebook served as perceived “safe spaces” for navigating identity challenges and engaging in emotionally honest self-disclosure, free from offline pressures.

However, posting content may also pose risks by heightening social scrutiny and conflicts [9, 27, 45, 54, 55, 68]. Because sharing content publicly makes posts hard to control, teens worry about unwanted attention, negative judgments, and pressure to curate their identities. For instance, Forte et al. [55] found that asking questions publicly could expose teens to fears of being seen as incompetent, while Forte et al. [54] showed that Facebook’s visible audiences pressured teens to delete posts with low engagement. Burnette et al. [27] reported that selfies often drew negative appearance-based feedback, prompting anxiety and self-censorship, and Elsaesser et al. [45] described how live streams sometimes escalated conflicts into public spectacles.

5.3.3 Engagement and Feedback: Teens Found Connection but Faced Pressure and Conflict. Adolescents’ engagement and feedback were commonly associated with the *Interactivity* affordance (real-time exchanges) and the *Emotional* affordance (how those exchanges made them feel). These affordances might foster connection and

Table 3: Summary of Social Media Activities, Features, Benefits, and Risks (RQ3)

Activity	Features	The Most Prominent Benefits	The Most Prominent Risks
Consuming Content (25%, N = 31)	Exploring feeds (81%), hashtags (13%), favorites (6%)	Allowing teens to access valuable information, learn practical skills, and broaden perspectives [4, 9, 16, 33, 42, 100, 126, 159, 160].	Exposing teens to misinformation that could negatively affect them [4, 42, 159].
Content Sharing (19%, N = 23)	Content posting (83%), live streaming (17%)	Providing teens with a space for self-expression [9, 16, 72, 78, 87, 88, 123, 171].	Increasing social scrutiny and interpersonal conflicts [9, 27, 45, 54, 55, 68].
Engagement and Feedback (19%, N = 23)	Likes (57%), comments (26%), tagging (17%)	Enabling teens to build social connections and find support through likes and comments [31, 68, 78, 81, 160, 172].	Exposing teens to heightened emotional vulnerability and negative self-perception [9, 27, 68, 78].
Private Messaging (16%, N = 19)	One-on-one chat (79%), group conversation (21%)	Allowing teens to join small private groups for community support [18, 31, 75, 90, 93, 119, 141].	Facilitating unsafe contact [6, 7, 10, 31].
Privacy Controls (7%, N = 9)	Audience settings (56%), blocking (33%), location sharing (11%)	Enabling teens to safeguard their well-being and manage their online presence [56, 68, 70, 122, 173].	Creating challenges in maintaining privacy boundaries [9, 53, 61, 122].
Network Building (7%, N = 8)	Following others (75%), follower count (25%)	Helping teens maintain relationships and reflect their personal identity [81, 82, 149].	Exposing teens to potential privacy threats and unwanted contact [81, 173].
Profile Management (7%, N = 8)	Secondary accounts (75%), bios (25%)	Allowing teens to curate their public presence and express themselves authentically [41, 68, 122, 126, 138, 173].	Subjecting teens to public judgment [56, 138].

validation but also risk amplifying comparison, pressure, and conflict. On the positive side, studies showed that engagement and feedback features provided several benefits, including building social connections and finding support through likes and comments [31, 68, 78, 81, 160, 172]. Jang et al. [68] demonstrated that teens used social media as a “conversation space,” where likes, tags, and comments sustained interactions and strengthened ties. Wang et al. [160] showed that even small gestures like likes gave adolescents recognition and social presence. This sense of acknowledgment reduced isolation, as Kline et al. [78] reported, by affirming that others shared similar struggles.

Nevertheless, engagement and feedback mechanisms also appeared to expose adolescents to emotional risks [9, 27, 68, 78]. Because interactivity made approval metrics instantly observable, likes became a potent source of self-validation, turning public counts into measures of self-worth [68]. The visibility of these metrics sometimes reinforced negative social comparison, and when posts failed to attract engagement, teens often felt inadequate [9]. Burnette et al. [27] documented the pressure to secure a certain number of likes, equating digital responses with social approval. Beyond self-esteem issues, “likes” carried subtler risks in advertising contexts. They distracted teens from the actual content. [160], increased exposure to targeted ads and privacy threats [172], and normalized unhealthy products such as junk food [89] and cannabis [154]. They also boosted the credibility of persuasive ads, making them seem peer-generated and harder for teens to identify as marketing [20]. Interactivity affordance further magnified negative emotional cues in comment threads. Elsaesser et al. [45] found that threads often sparked or escalated disputes, with tagging pulling additional users into conflicts and complicating de-escalation.

5.3.4 Private Messaging: Teens Found Support but Faced Harassment. Adolescents’ private-messaging practices were frequently mapped the *Interactivity* affordance (rapid back-and-forth exchanges) and the *Social* affordance (how those exchanges built or strained relationships). These affordances seemed to deepen peer support but also opened paths to harassment and exploitation. On the positive side, private messaging created fast, responsive conversations that nurtured belonging. Teens used small, private groups for community support [18, 31, 75, 90, 93, 119, 141]. Charmaraman et al. [31] found that selective sharing with trusted audiences allowed vulnerable expression without fear of judgment. Group chats particularly fostered encouragement and accountability, as peers motivated each other, reinforced shared goals, and reduced isolation [119]. These environments increased motivation and relatability by letting teens share challenges and successes [90, 93]. Teens also used direct messages for sensitive disclosure, advice, and coping strategies [7, 9, 10, 66]. Ali et al. [7] described teens sharing screenshots of upsetting interactions to seek guidance, while Huh-Yoo et al. [66] showed that Instagram DMs provided safe outlets for negative self-disclosure. Alsoubai et al. [10] further noted that private messages supported mental health disclosure and mutual care.

On the other hand, the same affordances can introduce serious risks. Because interactivity appeared to grant outsiders rapid, direct access, the social affordance seemed to quickly shift from fostering connection to enabling intrusion. Teens voiced fears of stranger contact and stalking on Snapchat [31], while Ali et al. [6] detailed bullying, blackmail, and emotional manipulation—sometimes involving suicide threats—in private chats. Interactivity also accelerates the spread of harmful norms, normalizing sexting, harassment, and hate speech [10]. Finally, private channels have been used for grooming and offline exploitation, as manipulative requests escalate out of view [7].

5.3.5 Privacy Controls: Teens Curated Visibility but Faced Adult Overreach and Data Risks. Overall, teens' use of privacy settings was mostly related to the platforms' *Visibility* affordance that reveals or hides content, and is motivated by the *Identity* affordance, how adolescents curate who sees which version of themselves. This pairing might have strengthened control over self-presentation yet still left gaps that undermined that control. On the positive side, several studies highlighted how adolescents actively used social media privacy controls to harness visibility in identity management, safeguarding their well-being and shaping their online personas [56, 68, 70, 122, 173]. Jang et al. [68] found that teens were more likely than adults to delete posts that did not receive enough likes, using content removal to protect the identity they wished to project. Freed et al. [56] showed that blocking, muting, and location-hiding features provided emotional relief, illustrating how visibility controls directly support teens' sense of safety and authentic self-expression.

On the negative side, because *Visibility* settings are imperfect, the *Identity* affordance can be compromised. Pater et al. [122] documented how the mere presence of adults on Facebook drove teens to migrate to Kik or Snapchat, showing that platform-level visibility gaps can push identity work elsewhere. Alluhidan et al. [9] described "sharenting" violations that teens could not prevent, highlighting how others' use of visibility overrides teens' identity boundaries. Feng and Xie [53] showed that skill gaps, apathy, or privacy fatigue kept teens from using the controls effectively. Thus, even with robust visibility tools, teens' ability to maintain a consistent, self-defined identity online remains contested by adult overreach, opaque data flows, and uneven digital literacy.

5.3.6 Network Building: Teens Built Connections but Faced Privacy Threats. Teens' network-building activities were mostly aligned with the *Association* affordance, which in turn was mostly associated with the *Social* human-centered affordance. These two affordances might shape how connections provide belonging and social capital, while also exposing teens to privacy risks and upsetting content. Studies have examined the strategies teens used to build and manage their networks [69, 81, 82, 106, 114, 149, 160, 173]. Through association moves such as adding or dropping ties, teens deliberately shaped networks to maintain relationships and express identity [81, 82, 149]. Stockdale and Coyne [149] found that teens often added others on social media to sustain friendships. Leary et al. [82] showed that Snapchat "streaks," where users exchanged snaps on consecutive days, reinforced communication and peer bonds. Landesman et al. [81] further noted that following and unfollowing reflected social alignment and identity, as teens curated digital spaces and shaped the content they encountered.

On the other hand, the same *Association* affordance may undermine the *Social* affordance when validation goals override safety. Prior research [173] highlighted that some teens engaged in risky behaviors by allowing bot accounts to follow them to inflate follower counts, exposing them to privacy threats and unwanted contact. Landesman et al. [81] showed that curated networks could still surface upsetting or harmful content. To manage these risks, teens often used blocking, unfollowing, and reporting—association "undo" actions that attempt to restore a healthy social environment. These findings suggest that while teens are deliberate in shaping

their networks, the pursuit of visibility and validation sometimes conflicts with their efforts to maintain safe and supportive online spaces.

5.3.7 Profile Management: Teens Crafted Personas but Amplified Peer Conflict. Profile Management was mostly associated with the *Visibility* affordance, which shapes what is shown to whom, which seemed to work hand-in-hand with the *Identity* affordance, how teens craft a sense of self. When used thoughtfully, these tools had the potential to let adolescents signal popularity and experiment with authentic selves, yet the same mechanics can broadcast harmful cues or fuel peer conflict. On the positive side, past research [41, 68, 122, 126, 138, 173] shows teens actively leveraging visibility controls to present, and sometimes partition, different versions of their identity. Jang et al. [68] found that bios served as micro-advertisements: teens highlighted hobbies or taglines to attract followers and boost social standing.

Yet profile management can invert those same affordances. Arseniev-Koehler et al. [12] documented bios that publicly signalled disordered-eating identities, normalising harmful behaviour and connecting teens to risky subcultures. Sanchez and Jenkins [138] highlighted gossip or "tea" pages that weaponised profile pages to broadcast rumours, while Freed et al. [56] traced retaliatory "clap-back" accounts that escalated conflicts and dragged in parents and schools. In each case, the visibility affordance amplifies negative peer dynamics, and the identity affordance—meant for self-presentation—becomes a conduit for harm.

6 DISCUSSION

In this section, we discuss the implications of our findings and identify potential gaps and opportunities that provide direction for future research.

6.1 Towards Affordance-Based and Youth-Centered Research Approaches for Adolescent Social Media Use

Our results show that a feature is just a tool, but it is the affordance, the way that the tool comes alive in context, that ultimately shapes teens' social media experiences. This interaction between youth, feature, and environment determines whether a teen feels supported or exposed, helped or harmed, as the same feature can produce radically different experiences depending on context. Therefore, the context within which affordances are studied is critical for youth-centered social media experiences. To move beyond these limitations and develop a more contextually-aware understanding, we argue that future work must systematically examine social media affordances within four important but underexplored contexts: *cross-platform*, *methodological*, *developmental*, and *social* contexts.

- First, our review highlights a lack of cross-platform understanding of how affordances operate. Although social media platforms share features, their affordances create distinct experiences; a "like" on TikTok is not the same as a "like" on Instagram [9]. We found that most prior studies focused on a single platform (Section 5.1.1), even though teens actively migrate across them for audience control (Section 5.2.5) [122]. This lack of comparative analysis makes it difficult to isolate

which design elements contribute to benefits versus risks. **Future work should conduct direct cross-platform comparisons, using shared measures to analyze how the same activity maps onto different experiences when mediated by the distinct affordances of various social media platforms.**

- Another key limitation in the existing literature is the methodological overreliance on surveys (Section 5.1.2). While surveys are valuable for capturing general attitudes, self-reported behaviors, and broad usage trends, they fall short in capturing the granular, moment-to-moment decisions youth make as they navigate various features and functionalities [151]. Methodologically, a move toward multi-method approaches is necessary to capture affordances in action. Combining the ecological validity of digital trace data with the rich contextual understanding from qualitative methods provides an effective way forward [10]. **Future work should prioritize multi-method designs that integrate digital trace data with qualitative methods, like participatory design and in-situ observations, to achieve a holistic understanding of teen-centered vocabulary and design for social media use.**
- From a developmental perspective, current research often treats adolescents as a monolithic group, overlooking how the perception of affordances changes with age. A 13-year-old's needs differ from a 17-year-old's, meaning they likely perceive and use affordances differently (Section 5.1.3). Failing to account for these developmental shifts limits our ability to design age-appropriate safety interventions. **Future research should adopt longitudinal designs and stratify analyses by narrower age bands (e.g., 13–14 vs. 16–17) to model how the enactment of social media affordances evolves across adolescent development.**
- Last, affordances are socially constructed. An affordance emerges from a three-way interaction between the user, the technology, and the social environment. For example, as shown in Section 5.1.3, teens often learned privacy tactics and norms from peers rather than the platform itself [173]. Likewise, decisions about who to follow are often treated as acts of social alignment that reflect group identity (Section 5.3.6) [81]. This social dimension means that individual perceptions of risk and benefit are shaped by the collective. **Future work thus should investigate how affordances are co-constructed within peer groups, mapping how norms about feature use spread through networks and shape individual behavior.** Overall, a context-aware approach is not just about guiding future work; it is about fostering approaches that lead to teen-centered affordances on social media that are safer by design, fostering positive development rather than simply mitigating harm.

6.2 Affordance-Specific Implications for Teen Experiences

6.2.1 Towards Understanding the Cognitive Costs of Discoverability. Our review showed that content consumption was the most

frequently studied activity, with discoverability and cognitive affordances emerging as the most common functional and human-centered affordances (Section 5.2.1). Discoverability can help surface useful content in teens' recommendation feeds, but it also has been mapped to less desirable cognitive outcomes, such as exposure to misinformation, poor-quality advice, or extremist messages [4, 42, 159]. Although teens often described themselves as exercising control over their feeds through curation and deliberate engagement [97, 159], they may not fully grasp how much the system already knows about them or the extent of underlying data collection [61]. When unexpected posts appeared, teens were sometimes observed to ignore them rather than question why they were recommended [97, 159]. Such responses can foster an overestimation of personal agency and an underestimation of algorithmic influence, allowing risky content to persist without explicit awareness [101]. This tendency is compounded by the fact that current feed algorithms often miss nuance in individual preferences [52]. Even when personalization appears effective, algorithms can narrow exposure to diverse viewpoints and representations that teens might not actively seek [97], with potential implications for both how teens learn and how confidently they hold certain beliefs.

To address these concerns, future research should examine recommendation feeds as sequences rather than single posts, tracking what appears across sessions or weeks: topic breadth, repetition, drift, and their effects on what teens learn, unlearn, and how confident they feel. Harmful experiences usually emerge through repeated patterns, not single exposures, which is why some argue for systems that optimize collective well-being across sequences [112]. It also matters that users notice subtle signals and want more say in how feeds evolve, suggesting that the key issue is not only what appears but how algorithms adapt [52]. For teens, the challenge is shaped by how they move through sessions, with reflection at the start and end of use showing that confidence and self-regulation hinge on session rhythms rather than individual posts [40]. In addition, an important next step is to study how system settings affect the interpretation of recommendations. Shifts in diversity or in "why am I seeing this?" explanations may change both content and how teens make sense of it. Direct control over diversity could shape whether they notice patterns [170] or recognize echo chambers [161]. Surprising items may determine whether feeds feel repetitive or stimulating [128], and the refresh rate may shape impressions of fairness and responsiveness [161]. Overall, these factors highlight how design choices influence how teens perceive and respond to recommendation cues.

6.2.2 Toward Understanding How Visibility Shapes Adolescent Identity. Our review revealed that visibility and identity were the dominant functional and human-centered affordances when youth shared content (Section 5.2.2). Visibility features like public posting and live streaming enabled identity expression and experimentation, especially in formats that felt low in risk (e.g., ephemeral sharing), yet also exposed teens to social scrutiny, reputational risks, and post-disclosure regret when audiences widened or metrics underperformed. Identity experiences thus may depend on who can see, how long content persists, and how imagined and actual audiences align. This suggests that identity expression on social media is not simply about what teens choose to share, but about how affordances

structure the boundaries of that expression. When visibility and persistence increase, authenticity is perceived as stronger, but the costs of exposure intensify, pointing to a tension between commitment and vulnerability [22]. When boundaries over “who can see” are difficult to control, teens engage in strategic platform sorting and secondary accounts to preserve spaces for candid expression, underscoring the need for design that enables fine-grained boundary management [118]. Additionally, when imagined and actual audiences collapse into one another, identity performances become fraught, producing self-doubt and reputational risk that complicate self-presentation across contexts [64].

Collectively, these patterns point to a broader design gap: current affordance configurations do not adequately support youth in negotiating these tensions. While platforms offer binary options such as “post vs. story” or public vs. private accounts, these blunt tools fail to capture the nuanced ways teens want to regulate visibility, persistence, and audience scope [77]. What is missing are more flexible and anticipatory mechanisms that help youth align imagined with actual audiences, or that allow for gradual shifts in persistence and visibility as comfort with disclosure changes [76]. Without such affordance-level sensitivity, teens remain caught between authenticity and vulnerability, improvising with secondary accounts and deletion strategies rather than being supported by design.

6.2.3 Toward Understanding the Emotional Implications of Interactivity. Our review showed that, in engagement and feedback contexts, interactivity and emotional affordances were most frequently examined (Section 5.2.3). The interactivity affordance created fast, quantifiable feedback loops that helped teens feel seen and connected (e.g., recognition via likes, encouragement in comments), but the obvious approval signals also intensified comparison, pressure, conflict, and even jealousy within romantic contexts when seemingly small gestures were publicly legible. These patterns might position emotional experiences as contingent on how quickly, publicly, and persistently feedback circulates—and on who is pulled into the exchange. When visible engagement arrives faster or in larger numbers than expected, teens tend to feel excited and post again sooner; when it falls short, they feel worse and wait longer [150]. For example, receiving many likes over a period of a week is associated with more enjoyment, belonging, and situational self-esteem, whereas receiving few likes is associated with more stress, sadness, anxiety, and feelings of rejection [158]. These shifts are consistent with fast, countable feedback loops and prominently displayed metrics that make recognition salient and invite comparison across peers. Teens’ diaries echo this pattern: they feel uplifted by positive comments and like counts, yet also report jealousy and self-consciousness when viewing others and while waiting for reactions or clearing notifications [39]. To address these concerns, future research should isolate design effects with causal probes that test interactivity settings, including public versus private like counts and temporal frictions such as reply to enforced delays, then estimate separate contributions to relief, validation, comparison, conflict, mindfulness, and rapport [96]. Finally, it should replicate across platforms by contrasting comment architectures, moderation tools, and built-in slow modes to identify configurations that reduce pressure and conflict while preserving connection.

6.3 Negotiating the Double-Edged Nature of Social Media Affordances

Our results show that affordances operate as double-edged design features, as they enable and constrain action and therefore possess the potential for both positive and negative experiences, regardless of the platforms’ original design intent [136]. We observed how the same affordances of visibility, interactivity, and discoverability can empower resilience while also amplifying vulnerability. Below, we synthesize three key tensions across these affordance domains.

6.3.1 Learning vs. Misinformation. Adolescents are increasingly turning to social media to learn about the world around them, and social media serves as an informal learning space where adolescents exchange knowledge and develop digital skills through peer interaction [30]. Such communities of practice provide opportunities for self-directed learning and identity exploration beyond formal education [5]. Meanwhile, the adolescents’ developmental stage makes them especially vulnerable to misinformation. Cognitive immaturity combined with emotional responses and peer influence can hinder critical evaluation of information [67, 84]. Discoverability affordances such as algorithmic feeds on profit-driven platforms can exacerbate these vulnerabilities by pushing emotionally arousing or confirmatory content that fuels echo chambers [118]. Research suggests that strategies that leverage adolescents’ sense of agency and social responsibility (i.e., teaching them how to help others detect misinformation) can improve critical information evaluation [115]. As such, supporting digital resilience, rather than restricting exposure, can help teens critically engage with social media content while benefiting from informal learning. The tension between learning and misinformation highlights the need for design that embeds credibility scaffolds into everyday use, such as source transparency and lateral reading prompts, or youth-led literacy initiatives. Future research can examine how literacy interventions can be co-designed with youth and integrated into everyday social media use, rather than siloed as external education.

6.3.2 Identity Expression vs. Reputational Harm. A central tension in adolescent social media use lies in the paradox of visibility affordance: platforms afford opportunities for identity expression while simultaneously exposing youth to reputational risks. Developmental theory has long emphasized identity exploration as a core task of adolescence [46], and social media platforms, with their identity and visibility affordances, provide unique contexts for experimenting with self-presentation, role-taking, and the negotiation of multiple selves [38]. Research consistently shows that active participation in online creation and sharing is associated with greater identity exploration and authenticity, both of which contribute to self-concept clarity [13]. At the same time, these opportunities come with risks when context collapses [19], where diverse audiences end up seeing the same post. More recent shows that challenge the visibility of go beyond just flattened audiences: posts can persist over time, change meaning in new contexts, and be interpreted in ways teens never intended [140]. As a result, self-presentations that feel safe in the moment can quickly turn into reputational threats. The social and developmental context can make this even harder, as long-term planning are still developing during adolescence, which

makes teens more likely to share in ways that later feel risky or regrettable [95].

To better support identity work, platforms should support layered visibility that allows adolescents to flexibly curate audiences and repair reputational damage. Beyond static privacy settings, platforms might normalize multi-profile use or ephemeral visibility to accommodate shifting developmental needs. For research, this tension calls for longitudinal studies that explore whether and how identity expression on social media intersects with reputational harm over time.

6.3.3 Connection vs. Intrusion. Social connections are central to adolescent development [24], and interactivity affordances such as likes, comments, and direct messages provide critical avenues for affirmation and belonging [38]. For many teens, especially those who feel isolated offline, social media platforms provide a vital connection; yet, when online belonging is not matched by offline support, it can lead to overuse and emotional distress [50]. The same features that make the connection rewarding can also contribute to intrusion and harm. Research on cyberbullying highlights how anonymity and disinhibition can turn social media platforms hostile, with victims experiencing heightened depression, anxiety, and even suicidal ideation [79]. The 24/7 accessibility of social media creates continuous exposure to such social stressors [109]. As such, connection is not inherently protective; the same affordances that foster belonging can amplify intrusion. Therefore, rather than restricting interaction, design should embed mechanisms that balance intimacy with protection. For example, customizable feedback visibility, consent-based entry into private conversations, or “pause” features could preserve connection while reducing intrusion. Researchers should further investigate how adolescents establish their own norms of interactivity and how platforms might scaffold these micro-level governance practices.

Taken together, the three cross-affordance tensions demonstrate that affordances can be best understood as features situated in context, agency, and support systems. Context, such as peer influence and culture, can shape visibility and interactivity, empowering or intrusive. Teens’ agency to manage and curate network and privacy settings can mediate how affordances are experienced. Support systems, such as access to peers, caregivers, educators, and other resources, can determine whether harms are escalated or mitigated. Therefore, for researchers and designers, the goals should not be turning affordances on or off; rather, to re-balance them in ways that promote benefits while reducing vulnerabilities.

6.4 Implications for Design

Our review showed that teens’ social media experiences varied across activities depending on platform affordances, highlighting opportunities to create tools that could enhance adolescents’ experiences. Building on these findings, we outline three design directions that could strengthen adolescent well-being on social media.

- **Implementing Evidence Cards and Session-Only Controls for Safer Feeds:** Our review shows that content consumption is the most frequently studied activity, with discoverability affordance sometimes leading to negative cognitive experiences, including amplified misinformation and

narrowed perspectives (Section 5.2.1). To address these challenges, platforms could introduce tools that raise awareness inside recommendation feeds. For example, adding credibility metrics that use machine learning to check claims in real time and surface evidence cards [17]. These could provide summaries of peer-reviewed sources and guidelines with a confidence rating (supported, mixed, unsupported), and links to abstracts. When evidence is weak or missing, the card should say so and offer evidence-based alternatives. This helps youth judge the credibility of suggested content, especially health advice that can be risky if followed blindly [144]. To reduce echo chambers, platforms could provide simple session-only controls such as a diversity slider to choose a wider mix or more of the same content, a one-tap “reset my feed” that returns recommendations to their usual state, and an optional timed deep-dive mode that focuses on one topic for a set period [52]. Because these settings expire at the end of the session, teens can adjust exposure without permanently changing the recommendation model, making drift and repetition easier to correct while preserving the learning benefits of algorithmic discovery.

- **Reducing Regret with Smarter Audience Tools:** Our review found that when youth shared content, visibility and identity were the key affordances (Section 5.2.2). Features like public posting and live-streaming enabled self-expression and experimentation but also exposed teens to scrutiny, reputational risks, and regret when audiences expanded or feedback fell short. To address these concerns, and building on our discussion in Section 6.2.2, social media platforms could implement flexible, anticipatory mechanisms such as a “start with close circle, expand later” option, where a post is first shared with a small, trusted group that can provide quick feedback (reactions or short notes) before the author decides to go public [58]. Platforms could also add a pre-post audience preview with alignment checks to show exactly who will see the post, flag likely out-of-scope viewers (e.g., friends of a tagged person or people reached through resharing), and offer one-tap controls to shrink or expand the audience or disable resharing [47]. Together, these steps would help align imagined and actual audiences, allow teens to shape identity expression within the right circles, and reduce risks of scrutiny, misinterpretation, and post-disclosure regret.
- **Redesigning Feedback Loops to Balance Support and Safety:** Our review disclosed that interactivity and emotional affordances shaped how adolescents experienced engagement and feedback online (Section 5.2.3). Fast, countable approval signals such as likes and public comments helped teens feel recognized, but also amplified cycles of comparison, pressure, and conflict when feedback fell short or negative comments spread widely. To mitigate these risks while preserving connection, platforms could redesign feedback loops to emphasize supportive engagement rather than raw counts. For instance, visible like tallies could be hidden by default, while private acknowledgments—such as subtle reactions viewable only to the post’s author—might encourage

validation without sparking peer comparison. Similarly, introducing pacing mechanisms in comment threads, such as temporary slow modes for replies, could prevent escalation while giving teens more time to process interactions before wider audiences are pulled in [96]. These adjustments shift focus from numerical approval toward meaningful exchanges, allowing adolescents to engage socially while reducing the emotional volatility tied to instant, public, and quantifiable feedback. In doing so, designs would better balance affirmation with safeguards against harmful emotional experiences.

6.5 Limitations and Future Research

There are several limitations that inform future research directions. First, our scope centered on studies that examined U.S. adolescents; this choice improved coherence but limited generalizability to other contexts, especially given that social media experiences vary across cultural, usage, and regulatory contexts [32, 74, 85]. We therefore limit our review to the U.S. context, where individualistic, autonomy-focused frameworks and an active regulatory landscape (e.g., COPPA and ongoing KOSA debates) shape adolescents' online safety in ways that differ from other settings [113], where safety practices are embedded in collectivist norms and youth-focused policy is less prominent as we detailed in Section 2.1. Future work could therefore extend the pipeline to cross-national and multilingual corpora, compare patterns across regulatory settings, and examine how affordances operated on emerging platforms and across broader age ranges. In addition, although our framework links features to activities and affordances, it abstracts the social context that shapes how functional affordances translate into human-centered experiences. Because affordances are interpreted through peer norms, culture, and developmental stage, future studies should model these factors as moderators along the pathway. Finally, platform features and policies evolve rapidly; as affordance configurations shift, some conclusions may become outdated. We therefore recommend treating our affordance mapping as a living framework and revisiting it periodically to reflect ongoing changes in design and practice.

7 Conclusion

This review developed a layered affordance-based framework to better understand adolescents' experiences on social media. Drawing on 66 empirical studies, we mapped specific platform features (e.g., likes, direct messages) onto broader user activities enabled by functional affordances such as *Visibility* and *Discoverability*. Building on these layers, we traced how these functions are associated with human-centered affordances that shape adolescents' identity, emotional, *cognitive*, and *social* experiences. This structured approach moves beyond broad screen-time debates by clarifying how platform design relates to teens' experiences. By mapping technical features to adolescents' lived experiences, the review offers researchers, designers, and policymakers a practical lens to judge when affordances create opportunities, when they introduce risks, and how research and design might chart directions for safer social media use for adolescents.

Acknowledgments

Dr. Wisniewski's research is supported by the U.S. National Science Foundation under grants #CNS-2550834, #IIS-2550812, #TI-2550746, and by the William T. Grant Foundation grant #187941. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the research sponsors.

References

- [1] 2025. Kids Online Safety Act. <https://www.congress.gov/bill/119th-congress/senate-bill/1748/text>
- [2] Zainab Agha, Naima Samreen Ali, Jinkyung Park, and Pamela J Wisniewski. 2025. A systematic review on design-based nudges for adolescent online safety. *International Journal of Child-Computer Interaction* 43 (2025), 100702.
- [3] Zainab Agha, Karla Badillo-Urquiola, and Pamela J Wisniewski. 2023. "Strike at the Root": Co-designing Real-Time Social Media Interventions for Adolescent Online Risk Prevention. *Proceedings of the ACM on Human-Computer Interaction* CSCW1 (2023), 1–32.
- [4] Selenne Alatorre, Aviva G Schwarz, Kelsey A Egan, Amanda R Feldman, Marielis Rosa, and Monica L Wang. 2023. Exploring social media preferences for healthy weight management interventions among adolescents of color: mixed methods study. *JMIR Pediatrics and Parenting* 6 (2023), e43961.
- [5] Naser GH Ali, Rabab D Alsaffar, Yousif H Alenzi, and Faisal M Almutairi. 2022. Sustaining Education by Actualizing Affordances of Social Media Platforms during the Pandemic. *International Education Studies* 15, 6 (2022), 94–108.
- [6] Naima Samreen Ali, Sarvech Qadir, Ashwaq Alsoubai, Munmun De Choudhury, Afsaneh Razi, and Pamela J Wisniewski. 2024. "I'm gonna KMS": From Imminent Risk to Youth Joking about Suicide and Self-Harm via Social Media. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*. 1–18.
- [7] Shiza Ali, Afsaneh Razi, Seunghyun Kim, Ashwaq Alsoubai, Joshua Gracie, Munmun De Choudhury, Pamela J Wisniewski, and Gianluca Stringhini. 2022. Understanding the digital lives of youth: Analyzing media shared within safe versus unsafe private conversations on Instagram. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*. 1–14.
- [8] Shiza Ali, Afsaneh Razi, Seunghyun Kim, Ashwaq Alsoubai, Chen Ling, Munmun De Choudhury, Pamela J Wisniewski, and Gianluca Stringhini. 2023. Getting meta: A multimodal approach for detecting unsafe conversations within instagram direct messages of youth. *Proceedings of the ACM on human-computer interaction* 7, CSCW1 (2023), 1–30.
- [9] Abdulmalik Alluhidan, Mamtaj Akter, Ashwaq Alsoubai, Jinkyung Katie Park, and Pamela Wisniewski. 2024. Teen Talk: The Good, the Bad, and the Neutral of Adolescent Social Media Use. *Proceedings of the ACM on Human-Computer Interaction* 8, CSCW2 (2024), 1–35.
- [10] Ashwaq Alsoubai, Afsaneh Razi, Zainab Agha, Shiza Ali, Gianluca Stringhini, Munmun De Choudhury, and Pamela J Wisniewski. 2024. Profiling the offline and online risk experiences of youth to develop targeted interventions for online safety. *Proceedings of the ACM on human-computer interaction* 8, CSCW1 (2024), 1–37.
- [11] Maria P Angel and Danah Boyd. 2024. Techno-legal solutionism: Regulating children's online safety in the United States. In *Proceedings of the Symposium on Computer Science and Law*. 86–97.
- [12] Alina Arseniev-Koehler, Hedwig Lee, Tyler McCormick, and Megan A Moreno. 2016. # Proana: Pro-eating disorder socialization on Twitter. *Journal of Adolescent Health* 58, 6 (2016), 659–664.
- [13] Hamide Avci, Laura Baams, and Tina Kretschmer. 2024. A systematic review of social media use and adolescent identity development. *Adolescent Research Review* (2024), 1–18.
- [14] Kate Barnes, Emily Newman, and Grace Keenan. 2023. A comparison of the impact of exposure to fit ideal and non-fit ideal body shapes in fitspiration imagery on women. *Computers in Human Behavior* 144 (2023), 107728.
- [15] Ashley M Barron, Elizabeth J Krumrei-Mancuso, and Jennifer A Harriger. 2021. The effects of fitspiration and self-compassion Instagram posts on body image and self-compassion in men and women. *Body Image* 37 (2021), 14–27.
- [16] Cynthia L Bennett, Jane E, Martez E Mott, Edward Cutrell, and Meredith Ringel Morris. 2018. How teens with visual impairments take, edit, and share photos on social media. In *Proceedings of the 2018 CHI conference on human factors in computing systems*. 1–12.
- [17] Md Momen Bhuiyan, Michael Horning, Sang Won Lee, and Tanushree Mitra. 2021. Nudged: Supporting news credibility assessment on social media through nudges. *Proceedings of the ACM on Human-Computer Interaction* 5, CSCW2 (2021), 1–30.
- [18] Martha Bigelow, Jenifer Vanek, Kendall King, and Nimo Abdi. 2017. Literacy as social (media) practice: Refugee youth and native language literacy at school.

- International Journal of Intercultural Relations* 60 (2017), 183–197.
- [19] Danah Boyd. 2010. Social network sites as networked publics: Affordances, dynamics, and implications. In *A networked self*. Routledge, 47–66.
 - [20] Marie Bragg, Samina Lutfeali, Tenay Greene, Jessica Osterman, and Madeline Dalton. 2021. How food marketing on Instagram shapes adolescents' food preferences: online randomized trial. *Journal of medical Internet research* 23, 10 (2021), e28689.
 - [21] Susan Branje, Elisabeth L De Moor, Jenna Spitzer, and Andrik I Becht. 2021. Dynamics of identity development in adolescence: A decade in review. *Journal of Research on Adolescence* 31, 4 (2021), 908–927.
 - [22] Kyla Noni Elizabeth Brathwaite. 2024. *Performative or authentic? How affordances signal (in) authentic digital allyship*. The Ohio State University.
 - [23] Virginia Braun and Victoria Clarke. 2012. Thematic analysis. American Psychological Association. *APA handbook of research methods in psychology* 2 (2012), 71.
 - [24] B Bradford Brown and James Larson. 2009. Peer relationships. *Adolescence handbook of adolescent psychology* 2 (2009), 74–103.
 - [25] Taina Bucher, Anne Helmond, et al. 2018. The affordances of social media platforms. *The SAGE handbook of social media* 1, 1 (2018), 233–253.
 - [26] Cody Buntain, Richard Bonneau, Jonathan Nagler, and Joshua A Tucker. 2021. YouTube recommendations and effects on sharing across online social platforms. *Proceedings of the ACM on Human-Computer Interaction* 5, CSCW1 (2021), 1–26.
 - [27] C Blair Burnette, Melissa A Kwitowski, and Suzanne E Mazzeo. 2017. "I don't need people to tell me I'm pretty on social media:" A qualitative study of social media and body image in early adolescent girls. *Body Image* 23 (2017), 114–125.
 - [28] Xavier Caddle, Jinkyung Katie Park, and Pamela J Wisniewski. 2024. A Stakeholders' Analysis of the Sociotechnical Approaches for Protecting Youth Online. In *Future of Information and Communication Conference*. Springer, 587–616.
 - [29] Pew Research Center. 2024. *Teens, Social Media, and Technology* 2024. <https://www.pewresearch.org/internet/2024/12/12/teens-social-media-and-technology-2024/>
 - [30] Linda Charmaraman, Catherine Grevet Delcourt, Sidrah Durrani, Jyontika Kapoor, Amanda M Richer, and Le Fan Xiao. 2022. The role of parents, other adults, peers and informal learning communities in shaping positive social media use in adolescent girls. *Information and Learning Sciences* 123, 7/8 (2022), 399–420.
 - [31] Linda Charmaraman and Catherine Grevet Delcourt. 2021. Prototyping for social wellbeing with early social media users: Belonging, experimentation, and self-care. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. 1–15.
 - [32] Justin Cheng, Moira Burke, and Bethany de Gant. 2021. Country differences in social comparison on social media. *Proceedings of the ACM on Human-Computer Interaction* 4, CSCW3 (2021), 1–26.
 - [33] Adrian Choi, Catherine D'Ignazio, Brooke Foucault Welles, and Andrea G Parker. 2023. Social media as a critical pedagogical tool: Examining the relationship between youths' online sociopolitical engagements and their critical consciousness. In *Proceedings of the 2023 CHI conference on human factors in computing systems*. 1–25.
 - [34] Federal Trade Commission et al. 2013. Children's online privacy protection rule. COPPA". [Online]. Available: <https://www.ftc.gov/enforcement/rules/rulemaking-regulatory-reform-proceedings/childrens-online-privacyprotection-rule>. [Accessed 23 May 2017] (2013).
 - [35] Ned Cooper, Tiffanie Horne, Gillian R Hayes, Courtney Heldreth, Michal Lahav, Jess Holbrook, and Lauren Wilcox. 2022. A systematic review and thematic analysis of community-collaborative approaches to computing research. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*. 1–18.
 - [36] Simone Cunningham, Chloe C Hudson, and Kate Harkness. 2021. Social media and depression symptoms: a meta-analysis. *Research on child and adolescent psychopathology* 49, 2 (2021), 241–253.
 - [37] Ana da Silva Pinho, Violeta Céspedes Izquierdo, Björn Lindström, and Wouter van den Bos. 2024. Youths' sensitivity to social media feedback: A computational account. *Science Advances* 10, 43 (2024), eadp8775.
 - [38] Katie Davis. 2012. Friendship 2.0: Adolescents' experiences of belonging and self-disclosure online. *Journal of adolescence* 35, 6 (2012), 1527–1536.
 - [39] Katie Davis, Rotem Landesman, Jina Yoon, JaeWon Kim, Daniela E Munoz Lopez, Lucia Magis-Weinberg, and Alexis Hiniker. 2025. "You Go Through So Many Emotions Scrolling Through Instagram": How Teens Use Instagram To Regulate Their Emotions. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*. 1–16.
 - [40] Katie Davis, Petr Slovak, Rotem Landesman, Caroline Pitt, Abdullatif Ghajar, Jessica Lee Schleider, Saba Kawas, Andrea Guadalupe Perez Portillo, and Nicole S Kuhn. 2023. Supporting Teens' intentional social media use through interaction design: An exploratory proof-of-concept study. In *Proceedings of the 22nd Annual ACM Interaction Design and Children Conference*. 322–334.
 - [41] Vanessa P Dennen, Stacey A Rutledge, and Lauren M Bagdy. 2019. Social media use in high school settings: Rules, outcomes, and educational opportunities. In *Proceedings of the 10th international conference on social media and society*. 205–213.
 - [42] Umama Dewan, Cora Sula, and Nora McDonald. 2024. Teen Reproductive Health Information Seeking and Sharing Post-Roe. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*. 1–12.
 - [43] Diana M Doumas and Aida Midgett. 2023. Witnessing cyberbullying and suicidal ideation among middle school students. *Psychology in the Schools* 4 (2023), 1149–1163.
 - [44] Nicole B Ellison and Jessica Vitak. 2015. Social network site affordances and their relationship to social capital processes. *The handbook of the psychology of communication technology* (2015), 203–227.
 - [45] Caitlin Elsaesser, Desmond Upton Patton, Emily Weinstein, Jacquelyn Santiago, Ayesha Clarke, and Rob Eschmann. 2021. Small becomes big, fast: Adolescent perceptions of how social media features escalate online conflict to offline violence. *Children and youth services review* 122 (2021), 105898.
 - [46] Erik H Erikson. 1968. *Identity: Youth and crisis*. Vol. 68. Norton.
 - [47] Sindhu Kiranmai Ernala, Stephanie S Yang, Yuxi Wu, Rachel Chen, Kristen Wells, and Sauvik Das. 2021. Exploring the utility versus intrusiveness of dynamic audience selection on Facebook. *Proceedings of the ACM on Human-Computer Interaction* 5, CSCW2 (2021), 1–30.
 - [48] Maryam Esfandiari, Beatrice Sciacca, Sandra Feijóo, Derek Alan Laffan, Tijana Milosevic, Carol O'Toole, and James O'Higgins Norman. 2025. Trends in digital technologies to address children's online safety education: A systematic scoping review. *International Journal of Educational Research Open* 9 (2025), 100462.
 - [49] Sandra K Evans, Katy E Pearce, Jessica Vitak, and Jeffrey W Treem. 2017. Explicating affordances: A conceptual framework for understanding affordances in communication research. *Journal of computer-mediated communication* 22, 1 (2017), 35–52.
 - [50] Matteo Angelo Fabris, Michele Settanni, Claudio Longobardi, and Davide Marengo. 2024. Sense of belonging at school and on social media in adolescence: Associations with educational achievement and psychosocial maladjustment. *Child Psychiatry & Human Development* 55, 6 (2024), 1620–1633.
 - [51] Michelle Faverio and Olivia Sidoti. 2024. Teens, Social Media and Technology 2024. <https://www.pewresearch.org/internet/2024/12/12/teens-social-media-and-technology-2024/>
 - [52] KJ Kevin Feng, Xander Koo, Lawrence Tan, Amy Bruckman, David W McDonald, and Amy X Zhang. 2024. Mapping the Design Space of Teachable Social Media Feed Experiences. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*. 1–20.
 - [53] Yang Feng and Wenjing Xie. 2014. Teens' concern for privacy when using social networking sites: An analysis of socialization agents and relationships with privacy-protecting behaviors. *Computers in Human Behavior* 33 (2014), 153–162.
 - [54] Andrea Forte, Denise Agosto, Michael Dickard, and Rachel Magee. 2016. The strength of awkward ties: online interactions between high school students and adults. In *Proceedings of the 2016 ACM International Conference on Supporting Group Work*. 375–383.
 - [55] Andrea Forte, Michael Dickard, Rachel Magee, and Denise E Agosto. 2014. What do teens ask their online social networks? Social search practices among high school students. In *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing*. 28–37.
 - [56] Diana Freed, Natalie N Bazarova, Sunny Consolvo, Eunice J Han, Patrick Gage Kelley, Kurt Thomas, and Dan Cosley. 2023. Understanding digital-safety experiences of youth in the US. In *Proceedings of the 2023 CHI Conference on Human factors in computing Systems*. 1–15.
 - [57] Robert P Gauthier, Mary Jean Costello, and James R Wallace. 2022. "I will not drink with you today": a topic-guided thematic analysis of addiction recovery on Reddit. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*. 1–17.
 - [58] Arup Kumar Ghosh, Charles E Hughes, and Pamela J Wisniewski. 2020. Circle of trust: a new approach to mobile online safety for families. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*. 1–14.
 - [59] James J Gibson. 2014. The theory of affordances:(1979). In *The people, place, and space reader*. Routledge, 56–60.
 - [60] Belen González-Larrea and Maria Jose Hernández-Serrano. 2020. Digital identity built through social networks: new trends in a hyperconnected world. In *Eighth international conference on technological ecosystems for enhancing multicultural-ity*. 940–944.
 - [61] Cami Goray and Sarita Schoenebeck. 2022. Youths' Perceptions of Data Collection in Online Advertising and Social Media. *Proceedings of the ACM on Human-Computer Interaction* 6, CSCW2 (2022), 1–27.
 - [62] Jane Harness, Kate Fitzgerald, Humayra Sullivan, and Ellen Selkie. 2022. Youth insight about social media effects on well/ill-being and self-modulating efforts. *Journal of Adolescent Health* 71, 3 (2022), 324–333.
 - [63] Ashley V Hill, Phoebe Balascio, Mikaela Moore, Tyia Wilson, Alana Fields, and Elizabeth Miller. 2025. How Racism and Discrimination Impacts Black Young Women's Sexual Health: The Influence of Racial and Sexual Stereotypes on Educational Access. *Journal of Adolescent Health* 76, 2 (2025), 316–322.

- [64] Erin E Hollenbaugh. 2021. Self-presentation in social media: Review and research opportunities. *Review of communication research* 9 (2021).
- [65] Gail Hornor. 2020. Online sexual solicitation of children and adolescents. *Journal of Pediatric Health Care* 6 (2020), 610–618.
- [66] Jina Huh-Yoo, Afsaneh Razi, Diep N Nguyen, Sampada Regmi, and Pamela J Wisniewski. 2023. "Help Me": Examining Youth's Private Pleas for Support and the Responses Received from Peers via Instagram Direct Messages. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*. 1–14.
- [67] Irwanto Irwanto, Tuti Bahfiarti, Andi Alimuddin Unde, and Alem Febri Sonni. 2025. Information disorder's impact on adolescents: publication trends and recommendations. *Frontiers in Communication* 10 (2025), 1495536.
- [68] Jin Yea Jang, Kyungsik Han, Patrick C Shih, and Dongwon Lee. 2015. Generation like: Comparative characteristics in instagram. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems*. 4039–4042.
- [69] Grace YoungJoo Jeon, Nicole B Ellison, Bernie Hogan, and Christine Greenhow. 2016. First-generation students and college: The role of Facebook networks as information sources. In *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing*. 887–899.
- [70] Haiyan Jia, Pamela J Wisniewski, Heng Xu, Mary Beth Rosson, and John M Carroll. 2015. Risk-taking as a learning process for shaping teen's online information privacy behaviors. In *Proceedings of the 18th ACM Conference on Computer-Supported Cooperative Work & Social Computing*. 583–599.
- [71] Jialun Aaron Jiang, Kandrea Wade, Casey Fiesler, and Jed R Brubaker. 2021. Supporting serendipity: Opportunities and challenges for Human-AI Collaboration in qualitative analysis. *Proceedings of the ACM on Human-Computer Interaction* 5, CSCW1 (2021), 1–23.
- [72] Zayira Jordán-Conde, Brian Mennecke, and Anthony Townsend. 2014. Late adolescent identity definition and intimate disclosure on Facebook. *Computers in human behavior* 33 (2014), 356–366.
- [73] Elena Karahanna, Sean Xin Xu, Yan Xu, and Nan Zhang. 2018. The needs-affordances-features perspective for the use of social media. *MIS quarterly* 42, 3 (2018), 737–A23.
- [74] Smirity Kaushik, Tanusree Sharma, Yaman Yu, Amna F Ali, Yang Wang, and Yixin Zou. 2024. Cross-country examination of people's experience with targeted advertising on social media. In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*. 1–10.
- [75] M Laeeq Khan, Donghee Yvette Wohn, and Nicole B Ellison. 2014. Actual friends matter: An internet skills perspective on teens' informal academic collaboration on Facebook. *Computers & Education* 79 (2014), 138–147.
- [76] JaeWon Kim, Soobin Cho, Robert Wolfe, Jishnu Hari Nair, and Alexis Hiniker. 2025. Privacy as Social Norm: Systematically Reducing Dysfunctional Privacy Concerns on Social Media. *Proceedings of the ACM on Human-Computer Interaction* 9, 2 (2025), 1–39.
- [77] JaeWon Kim, Robert Wolfe, Ramya Bhagirathi Subramanian, Mei-Hsuan Lee, Jessica Colnago, and Alexis Hiniker. 2025. Trust-Enabled Privacy: Social Media Designs to Support Adolescent User Boundary Regulation. *arXiv preprint arXiv:2502.19082* (2025).
- [78] Matthew Kline, Ashley M Metcalf, Ekta Patel, Elizabeth L Chang, and Margaret B Nguyen. 2023. Adolescent experiences with social media and suicidality. *Academic pediatrics* 23, 4 (2023), 755–761.
- [79] Vidhya Lakshmi Kumar and Mark A Goldstein. 2020. Cyberbullying and adolescents. *Current pediatrics reports* 8, 3 (2020), 86–92.
- [80] Irene Kwan, Kelly Dickson, Michelle Richardson, Wendy MacDowall, Helen Burchett, Claire Stansfield, Ginny Brunton, Katy Sutcliffe, and James Thomas. 2020. Cyberbullying and children and young people's mental health: a systematic map of systematic reviews. *Cyberpsychology, Behavior, and Social Networking* 23, 2 (2020), 72–82.
- [81] Rotem Landesman, Jina Yoon, Jaewon Kim, Daniela E Munoz Lopez, Lucia Magis-Weinberg, Alexis Hiniker, and Katie Davis. 2024. "I Just Don't Care Enough To Be Interested": Teens' Moment-By-Moment Experiences on Instagram. In *Proceedings of the 23rd Annual ACM Interaction Design and Children Conference*. 14–29.
- [82] Miriam P Leary, Emily N Clegg, Madison E Santella, Pamela J Murray, Julie S Downs, and Melissa D Olfert. 2019. Consumption of health-related content on social media among adolescent girls: mixed-methods pilot study. *JMIR Formative Research* 3, 1 (2019), e11404.
- [83] Alex Leavitt. 2015. "This is a Throwaway Account" Temporary Technical Identities and Perceptions of Anonymity in a Massive Online Community. In *Proceedings of the 18th ACM conference on computer supported cooperative work & social computing*. 317–327.
- [84] Marine Lemaire, Steeven Ye, Lorna Le Stanc, Grégoire Borst, and Mathieu Casotti. 2025. The development of media truth discernment and fake news detection is related to the development of reasoning during adolescence. *Scientific Reports* 15, 1 (2025), 6854.
- [85] Lanjie Li. 2024. Addressing cross-cultural design challenges in social media platforms: A human-computer interaction perspective. In *International Conference on Human-Computer Interaction*. Springer, 75–88.
- [86] Sonia Livingstone, Reidar Schei Jessen, Mariya Stoilova, Line Indrevoll Stånicke, Richard Graham, Elisabeth Staksrud, and Tine Jensen. 2025. Can platform literacy protect vulnerable young people against the risky affordances of social media platforms? *Information, Communication & Society* (2025), 1–18.
- [87] Danielle Lottridge, Frank Bentley, Matt Wheeler, Jason Lee, Janet Cheung, Katherine Ong, and Cristy Rowley. 2017. Third-wave livestreaming: Teens' long form selfie. In *Proceedings of the 19th international conference on human-computer interaction with mobile devices and services*. 1–12.
- [88] Michal Luria and Nate Foulds. 2021. Hashtag-forget: using social media ephemerality to support evolving identities. In *Extended abstracts of the 2021 CHI conference on human factors in computing systems*. 1–5.
- [89] Samina Lutfaeli, Tisheya Ward, Tenay Greene, Josh Arshonsky, Azizi Seixas, Madeline Dalton, Marie A Bragg, et al. 2020. Understanding the extent of adolescents' willingness to engage with food and beverage companies' Instagram accounts: Experimental survey study. *JMIR public health and surveillance* 6, 4 (2020), e20336.
- [90] Joanne Chen Lyu, Aliyyat Afolabi, Justin S White, and Pamela M Ling. 2022. Perceptions and aspirations toward peer mentoring in social media-based electronic cigarette cessation interventions for adolescents and young adults: focus group study. *JMIR Formative Research* 6, 12 (2022), e42538.
- [91] Renkai Ma, Yue You, Xinning Gui, and Yubo Kou. 2023. How Do Users Experience Moderation?: A Systematic Literature Review. *Proceedings of the ACM on Human-Computer Interaction* 7, CSCW2 (2023), 1–30.
- [92] Anne J Maheux, Kaitlyn Burnell, Maria T Maza, Kara A Fox, Eva H Telzer, and Mitchell J Prinstein. 2025. Annual Research Review: Adolescent social media use is not a monolith: toward the study of specific social media components and individual differences. *Journal of Child Psychology and Psychiatry* 66, 4 (2025), 440–459.
- [93] Faisal S Malik, Cara Lind, Sarah Duncan, Connor Mitrovich, Michael Pascual, and Joyce P Yi-Frazier. 2021. Augmenting traditional support groups for adolescents with type 1 diabetes using Instagram: mixed methods feasibility study. *JMIR diabetes* 6, 4 (2021), e21405.
- [94] HM Mamudu, CA Nwabueze, JS Yang, TK Mackey, M Ahuja, A Smith, FM Weierbach, M McNabb, C Minnick, and A Jones. 2022. Social media and use of electronic nicotine delivery systems among school-going adolescents in a rural distressed Appalachian community. *Preventive Medicine Reports* 29 (2022), 101953.
- [95] Francisco Marquez-Ramos, David Alarcon, Josue G Amian, Cristina Fernandez-Portero, Maria J Arenilla-Villalba, and Jose Sanchez-Medina. 2023. Risk decision making and executive function among adolescents and young adults. *Behavioral sciences* 13, 2 (2023), 142.
- [96] Teale W Masrani, Jack Jamieson, Naomi Yamashita, and Helen Ai He. 2023. Slowing it down: Towards facilitating interpersonal mindfulness in online polarizing conversations over social media. *Proceedings of the ACM on Human-Computer Interaction* 7, CSCW1 (2023), 1–27.
- [97] Nora McDonald, John S Seberger, and Afsaneh Razi. 2024. For Me or Not for Me? The Ease With Which Teens Navigate Accurate and Inaccurate Personalized Social Media Content. In *Proceedings of the CHI Conference on Human Factors in Computing Systems*. 1–7.
- [98] Fenwick McKelvey and Robert Hunt. 2019. Discoverability: Toward a definition of content discovery through platforms. *Social Media+ Society* 5, 1 (2019), 2056305118819188.
- [99] Sarah McRoberts, Elizabeth Bonsignore, Tamara Peyton, and Svetlana Yarosh. 2016. Do it for the viewers! Audience engagement behaviors of young YouTubers. In *Proceedings of the The 15th International Conference on Interaction Design and Children*. 334–343.
- [100] Sonia Mehta, Kelsey Porada, and Vanessa McFadden. 2021. Did you get my snap? Snapchat as a health education tool for hospitalized adolescents. *Journal of Adolescent Health* 68, 2 (2021), 411–413.
- [101] Ashlee Milton, Leah Ajmani, Michael Ann DeVito, and Stevie Chancellor. 2023. "I see me here": mental health content, community, and algorithmic curation on TikTok. In *Proceedings of the 2023 CHI conference on human factors in computing systems*. 1–17.
- [102] David Moher, Alessandro Liberati, Jennifer Tetzlaff, Douglas G Altman, Prisma Group, et al. 2010. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *International journal of surgery* 8, 5 (2010), 336–341.
- [103] Megan A Moreno and Jonathan D'Angelo. 2019. Social media intervention design: applying an affordances framework. *Journal of Medical Internet Research* 21, 3 (2019), e11014.
- [104] Megan A Moreno and Yalda T Uhls. 2019. Applying an affordances approach and a developmental lens to approach adolescent social media use. *Digital health* 5 (2019), 2055207619826678.
- [105] Sheza Naveed, Hamza Naveed, Mobin Javed, and Maryam Mustafa. 2022. "Ask this from the person who has private stuff": Privacy Perceptions, Behaviours and Beliefs Beyond WEIRD. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*. 1–17.

- [106] Sonya Negri. 2019. Depressive symptoms predict characteristics of online social networks. *Journal of Adolescent Health* 65, 1 (2019), 101–106.
- [107] Sonya Negri. 2020. How the structure of egocentric Facebook networks is associated with exposure to risky content for maltreated versus comparison youth. *Children and youth services review* 109 (2020), 104700.
- [108] Jacqueline Nesi, W Andrew Rothenberg, Andrea M Hussong, and Kristina M Jackson. 2017. Friends' alcohol-related social networking site activity predicts escalations in adolescent drinking: mediation by peer norms. *Journal of Adolescent Health* 60, 6 (2017), 641–647.
- [109] Charisse L Nixon. 2014. Current perspectives: the impact of cyberbullying on adolescent health. *Adolescent health, medicine and therapeutics* (2014), 143–158.
- [110] Donald A Norman. 1999. Affordance, conventions, and design. *interactions* 6, 3 (1999), 38–43.
- [111] A Norman Donald. 2013. *The design of everyday things*. MIT Press.
- [112] Dimitri Ognibene, Rodrigo Wilkens, Davide Taibi, Davinia Hernández-Leo, Udo Kruschwitz, Gregor Donabauer, Emily Theophilou, Francesco Lomonaco, Sathya Bursic, Rene Alejandro Lobo, et al. 2023. Challenging social media threats using collective well-being-aware recommendation algorithms and an educational virtual companion. *Frontiers in Artificial Intelligence* 5 (2023), 654930.
- [113] Ozioma C Oguine, Oghenemaro Anuyah, Zainab Agha, Iris Melgare, Adriana Alvarado Garcia, and Karla Badillo-Urquiola. 2025. Online Safety for All: Sociocultural Insights from a Systematic Review of Youth Online Safety in the Global South. *arXiv preprint arXiv:2504.20308* (2025).
- [114] Jimin Oh, Stephen Bonett, Elissa C Kranzler, Bruno Sacconi, and Robin Stevens. 2022. User- and message-level correlates of endorsement and engagement for HIV-related messages on Twitter: cross-sectional study. *JMIR Public Health and Surveillance* 8, 6 (2022), e32718.
- [115] Gábor Orosz, Laura Faragó, Benedek Paskuj, and Péter Kerkó. 2024. Strategies to combat misinformation: Enduring effects of a 15-minute online intervention on critical-thinking adolescents. *Computers in Human Behavior* 159 (2024), 108338.
- [116] Emily B O'Day and Richard G Heimberg. 2021. Social media use, social anxiety, and loneliness: A systematic review. *Computers in Human Behavior Reports* 3 (2021), 100070.
- [117] Xinru Page, Andrew Capener, Spring Cullen, Tao Wang, Monica Garfield, and Pamela J. Wisniewski. 2022. Perceiving affordances differently: the unintended consequences when young autistic adults engage with social media. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*. 1–21.
- [118] Jinkyung Katie Park, Renkai Ma, Naima Samreen Ali, Naulsberry Jean Baptiste, Zainab Agha, and Pamela J Wisniewski. 2025. Teens, Privacy, and Algorithms: Navigating and Co-Designing Solutions for Interpersonal Boundary Management on Social Media. In *Proceedings of the 24th Interaction Design and Children*. 589–607.
- [119] Elizabeth Prout Parks, Renee'H Moore, Ziyi Li, Chanelle T Bishop-Gilyard, Andrew R Garrett, Douglas L Hill, Yasmeen P Bruton, David B Sarwer, et al. 2018. Assessing the feasibility of a social media to promote weight management engagement in adolescents with severe obesity: pilot study. *JMIR Research Protocols* 7, 3 (2018), e8229.
- [120] Dilisha Patel, Ann Blandford, Mark Warner, Jill Shawe, and Judith Stephenson. 2019. "I feel like only half a man" Online Forums as a Resource for Finding a "New Normal" for Men Experiencing Fertility Issues. *Proceedings of the ACM on Human-Computer Interaction* 3, CSCW (2019), 1–20.
- [121] Jessica Pater, Amanda Coupe, Rachel Pfafman, Chanda Phelan, Tammy Toscos, and Maia Jacobs. 2021. Standardizing reporting of participant compensation in HCI: A systematic literature review and recommendations for the field. In *Proceedings of the 2021 CHI conference on human factors in computing systems*. 1–16.
- [122] Jessica A Pater, Andrew D Miller, and Elizabeth D Mynatt. 2015. This digital life: A neighborhood-based study of adolescents' lives online. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems*. 2305–2314.
- [123] Morgan E PettyJohn, Kyla M Cary, Erin Nolen, and Toni A Gallegos. 2025. "I'm Not Experienced... Please Send Advice": Teens Seeking Information and Advice About Sexual Behaviors on Reddit. *The Journal of Sex Research* (2025), 1–12.
- [124] Jennifer Pierre. 2019. Chats over spats: Exploring social media use for mentorship in youth development programs. *Proceedings of the ACM on Human-Computer Interaction* 3, CSCW (2019), 1–16.
- [125] Anthony T Pinter, Pamela J Wisniewski, Heng Xu, Mary Beth Rosson, and Jack M Carroll. 2017. Adolescent online safety: Moving beyond formative evaluations to designing solutions for the future. In *Proceedings of the 2017 Conference on Interaction Design and Children*. 352–357.
- [126] Caroline Pitt, Adam Bell, Brandyn S. Boyd, Nikki Demmel, and Katie Davis. 2021. Connected learning, collapsed contexts: Examining teens' sociotechnical ecosystems through the lens of digital badges. In *Proceedings of the 2021 CHI conference on human factors in computing systems*. 1–14.
- [127] Selena I Quiroz, Thao Ha, and Samantha F Anderson. 2024. "You liked that Instagram post?!" Adolescents' jealousy and digital dating abuse behaviors in reaction to digital romantic relationship threats. *Computers in Human Behavior* 153 (2024), 108111.
- [128] Arpit Rana and Derek Bridge. 2017. Explanation Chains: Recommendations by Explanation. In *RecSys Posters*.
- [129] Afsaneh Razi, Ashwaq AlSoubai, Seunghyun Kim, Shiza Ali, Gianluca Stringhini, Munmun De Choudhury, and Pamela J Wisniewski. 2023. Sliding into My DMs: Detecting Uncomfortable or Unsafe Sexual Risk Experiences within Instagram Direct Messages Grounded in the Perspective of Youth. *Proceedings of the ACM on Human-Computer Interaction* CSCW1 (2023), 1–29.
- [130] Afsaneh Razi, Karla Badillo-Urquiola, and Pamela J Wisniewski. 2020. Let's talk about sext: How adolescents seek support and advice about their online sexual experiences. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*. 1–13.
- [131] Afsaneh Razi, Seunghyun Kim, Ashwaq AlSoubai, Gianluca Stringhini, Thamar Solorio, Munmun De Choudhury, and Pamela J Wisniewski. 2021. A human-centered systematic literature review of the computational approaches for online sexual risk detection. *Proceedings of the ACM on human-computer interaction* 5, CSCW2 (2021), 1–38.
- [132] Protection Regulation. 2018. General data protection regulation. *Intouch* 25 (2018), 1–5.
- [133] Ronald E Rice, Sandra K Evans, Katy E Pearce, Anu Sivunen, Jessica Vitak, and Jeffrey W Treem. 2017. Organizational media affordances: Operationalization and associations with media use. *Journal of Communication* 67, 1 (2017), 106–130.
- [134] Veronica A Rivera, Daricia Wilkinson, Aurelia Augusta, Sophie Li, Elissa M Redmiles, and Angelika Strohmayer. 2024. Safer Algorithmically-Mediated Offline Introductions: Harms and Protective Behaviors. *Proceedings of the ACM on Human-Computer Interaction* 8, CSCW2 (2024), 1–43.
- [135] Tomi-Ann Roberts, Elizabeth A Daniels, Jason M Weaver, and Leslie Scott Zanolovich. 2022. "Intermission!" A short-term social media fast reduces self-objectification among pre-teen and teen dancers. *Body Image* 43 (2022), 125–133.
- [136] Alexander Ronzhyn, Ana Sofia Cardenal, and Albert Batlle Rubio. 2023. Defining affordances in social media research: A literature review. *New Media & Society* 25, 11 (2023), 3165–3188.
- [137] Rebecca Salganik, Valdy Wiratama, Heritiana Ranaivoson, and Adelaida Afilipoaie. 2024. Navigating Discoverability in the Digital Era: A Theoretical Framework. *arXiv preprint arXiv:2410.09917* (2024).
- [138] Giselle Sanchez and Janis H Jenkins. 2024. Social media & subjectivity: Adolescent lived experiences with social media in a Southern California middle school. *Social Science & Medicine* 348 (2024), 116839.
- [139] Natalie M Saragosa-Harris, Alexandra O Cohen, Travis R Reneau, William J Villano, Aaron S Heller, and Catherine A Hartley. 2022. Real-world exploration increases across adolescence and relates to affect, risk taking, and social connectivity. *Psychological science* 33, 10 (2022), 1664–1679.
- [140] Kristin Sarmiento, Isabelle Cotton, Josh Terry, Lea Ventura, and Shayli Jimenez. 2024. Why Don't We Post (Like We Used To)? Multidimensional Context Collapse and Teenagers' Generative Responses to the Original Paradigm of Social Media. In *Ethnographic Praxis in Industry Conference Proceedings*, Vol. 2024. Wiley Online Library, 336–364.
- [141] Erin Schoenfelder, Megan Moreno, Molly Wilner, Kathryn B Whitlock, and Jason A Mendoza. 2017. Piloting a mobile health intervention to increase physical activity for adolescents with ADHD. *Preventive medicine reports* 6 (2017), 210–213.
- [142] Richard [D-CT Sen. Blumenthal. 2022. *Text - S.3663 - 117th Congress (2021-2022): Kids Online Safety Act*. <http://www.congress.gov/bills/117th-congress/senate-bill/3663/text> Archive Location: 2022-02-16.
- [143] Janine S Senekal, Gabriella Ruth Groenewald, Lisa Wolfaardt, Cisca Jansen, and Kayla Williams. 2023. Social media and adolescent psychosocial development: a systematic review. *South African Journal of Psychology* 53, 2 (2023), 157–171.
- [144] Zubair Shah, Didi Surian, Amalie Dyda, Enrico Coiera, Kenneth D Mandl, and Adam G Dunn. 2019. Automatically appraising the credibility of vaccine-related web pages shared on social media: a Twitter surveillance study. *Journal of medical Internet research* 21, 11 (2019), e14007.
- [145] Emily Sidnam-Mauch and Peter Monge. 2024. Individual Differences and Technology Affordances Combine to Predict Mobile Social Media Distraction Behaviors and Consequences. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*. 1–18.
- [146] Suyesha Singh and Vaishnavi Nambiar. 2024. Role of artificial intelligence in the prevention of online child sexual abuse: A systematic review of literature. *Journal of Applied Security Research* 19, 4 (2024), 586–627.
- [147] Ivana Stamenković and Tatjana Đukić Živadinović. 2022. Social Media and Interactivity From Users' Perspective. *Applied Media Studies Journal* 3, 2 (2022), 21–36.
- [148] Robin C Stevens, Bridgette M Brawner, Elissa Kranzler, Salvatore Giorgi, Elizabeth Lazarus, Maramawit Abera, Sarah Huang, and Lyle Ungar. 2020. Exploring substance use tweets of youth in the United States: mixed methods study. *JMIR Public Health and Surveillance* 6, 1 (2020), e16191.

- [149] Laura A Stockdale and Sarah M Coyne. 2020. Bored and online: Reasons for using social media, problematic social networking site use, and behavioral outcomes across the transition from adolescence to emerging adulthood. *Journal of adolescence* 79 (2020), 173–183.
- [150] Kseniya Stsiampkouskaya, Adam Joinson, Lukasz Piwek, and Carl-Philip Ahlbom. 2021. Emotional responses to likes and comments regulate posting frequency and content change behaviour on social media: An experimental study and mediation model. *Computers in Human Behavior* 124 (2021), 106940.
- [151] Mubashir Sultan, Christin Scholz, and Wouter van den Bos. 2023. Leaving traces behind: Using social media digital trace data to study adolescent wellbeing. *Computers in Human Behavior Reports* 10 (2023), 100281.
- [152] Katie Salen Tekinbaş, Krithika Jagannath, Ulrik Lyngs, and Petr Slovák. 2021. Designing for youth-centered moderation and community governance in minecraft. *ACM Transactions on Computer-Human Interaction (TOCHI)* 28, 4 (2021), 1–41.
- [153] Melina A Throuvala, Mark D Griffiths, Mike Rennoldson, and Daria J Kuss. 2019. Motivational processes and dysfunctional mechanisms of social media use among adolescents: A qualitative focus group study. *Computers in Human Behavior* 93 (2019), 164–175.
- [154] Pamela J Trangenstein, Jennifer M Whitehill, Marina C Jenkins, David H Jernigan, and Megan A Moreno. 2019. Active cannabis marketing and adolescent past-year cannabis use. *Drug and alcohol dependence* 204 (2019), 107548.
- [155] Jeffrey W Treem and Paul M Leonardi. 2013. Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association. *Annals of the International Communication Association* 36, 1 (2013), 143–189.
- [156] Patti M Valkenburg. 2022. Social media use and well-being: What we know and what we need to know. *Current opinion in psychology* 45 (2022), 101294.
- [157] Julia Vassey, Arthur Galimov, Chris J Kennedy, Erin A Vogel, and Jennifer B Unger. 2022. Frequency of social media use and exposure to tobacco or nicotine-related content in association with E-cigarette use among youth: a cross-sectional and longitudinal survey analysis. *Preventive medicine reports* 30 (2022), 102055.
- [158] Angelina Voggenreiter, Sophie Brandt, Fabian Putterer, Andreas Frings, and Juergen Pfeffer. 2024. The Role of Likes: How Online Feedback Impacts Users' Mental Health. In *Proceedings of the 16th ACM Web Science Conference*. 302–310.
- [159] Chun-Han Wang, Stephen Tsung-Han Sher, Isabela Salman, Kelly Janek, and Chia-Fang Chung. 2022. "TikTok made me do it": teenagers' perception and use of food content on TikTok. In *Proceedings of the 21st annual ACM interaction design and children conference*. 458–463.
- [160] Chun-Han Ariel Wang, Stephen Tsung-Han Sher, and Chia-Fang Chung. 2024. From Viral Content to Real-Life Cuisine and Beyond: Examining Teenagers' Interactions with TikTok Food Videos and the Influence on their Food Practices. *Proceedings of the ACM on Human-Computer Interaction* 8, CSCW2 (2024), 1–30.
- [161] Wenjie Wang, Fuli Feng, Liqiang Nie, and Tat-Seng Chua. 2022. User-controllable recommendation against filter bubbles. In *Proceedings of the 45th international ACM SIGIR conference on research and development in information retrieval*. 1251–1261.
- [162] Emily Weinstein. 2017. Adolescents' differential responses to social media browsing: Exploring causes and consequences for intervention. *Computers in Human Behavior* 76 (2017), 396–405.
- [163] Don Winiecki, Francesca Spezzano, and Chandler Underwood. 2023. Understanding Teenagers' Real and Fake News Sharing on Social Media. In *Proceedings of the 22nd Annual ACM Interaction Design and Children Conference*. 598–602.
- [164] Pamela Wisniewski, Haiyan Jia, Heng Xu, Mary Beth Rosson, and John M Carroll. 2015. "Preventative" vs. "Reactive" How Parental Mediation Influences Teens' Social Media Privacy Behaviors. In *Proceedings of the 18th ACM conference on computer supported cooperative work & social computing*. 302–316.
- [165] Pamela J Wisniewski, Jessica Vitak, and Heidi Hartikainen. 2022. Privacy in adolescence. In *Modern socio-technical perspectives on privacy*. Springer International Publishing Cham, 315–336.
- [166] Claes Wohlin. 2014. Guidelines for snowballing in systematic literature studies and a replication in software engineering. In *Proceedings of the 18th international conference on evaluation and assessment in software engineering*. 1–10.
- [167] Lara N Wolfers and Sonja Utz. 2022. Social media use, stress, and coping. *Current Opinion in Psychology* 45 (2022), 101305.
- [168] Wenjing Xie and Cheeyoun Kang. 2015. See you, see me: Teenagers' self-disclosure and regret of posting on social network site. *Computers in Human Behavior* 52 (2015), 398–407.
- [169] Hongjun Yang and Shengtai Zhang. 2022. Social media affordances and fatigue: The role of privacy concerns, impression management concerns, and self-esteem. *Technology in Society* 71 (2022), 102142.
- [170] Wenzhuo Yang, Jia Li, Chenxi Li, Latrice Barnett, Markus Anderle, Simo Arajarvi, Harshavardhan Utharavalli, Caiming Xiong, and Steven Hoi. 2021. On the diversity and explainability of recommender systems: A practical framework for enterprise app recommendation. In *Proceedings of the 30th ACM International Conference on Information & Knowledge Management*. 4302–4311.
- [171] Svetlana Yarosh, Elizabeth Bonsignore, Sarah McRoberts, and Tamara Peyton. 2016. YouTube: Youth video authorship on YouTube and Vine. In *Proceedings of the 19th ACM conference on computer-supported cooperative work & social computing*. 1423–1437.
- [172] Seounmi Youn and Wonsun Shin. 2019. Teens' responses to Facebook newsfeed advertising: The effects of cognitive appraisal and social influence on privacy concerns and coping strategies. *Telematics and informatics* 38 (2019), 30–45.
- [173] Dorothy Zhao, Mikako Inaba, and Andrés Monroy-Hernández. 2022. Understanding teenage perceptions and configurations of privacy on instagram. *Proceedings of the ACM on Human-Computer Interaction* 6, CSCW2 (2022), 1–28.