



Tracing Change in Social Media Use: A Qualitative Longitudinal Study

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Abstract

This study reveals a significant shift in how users perceive and engage with social media over time. Our analysis is based on qualitative longitudinal research carried out over ten years, involving a small group of participants in 2012, 2017, and 2022. Semi-structured, in-depth interviews were conducted using stimulated recall allowing for retrospection and reflection. Through this methodology, we trace the shifting perceptions of social media users, from initially embracing these platforms for quick, fun, and social activities, to later recognizing their potential intrusiveness and seeking strategies to manage their use. We outline three central trajectories that illustrate shifts in social media use across time: from public performance to private interaction, from producing to consuming and from fun to problematic. For HCI and social media studies, these findings underscore the need to prioritize user agency, ethical design practices, and longitudinal research endeavors to understand the evolving impacts of social media.

CCS Concepts

• **Human-centered computing**; • **Collaborative and social computing**; • **Collaborative and social computing systems and tools**; • **Social networking sites**;

Keywords

Social media, Social media use, Longitudinal, QLR, Qualitative methods, Understanding people

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1 Introduction

Last year marked the 20th anniversary of Facebook, and in the two decades since that launch, numerous social media platforms have emerged, competing for users' attention and time. Platforms that were once smaller and more distinct, offering different opportunities for sharing text, images, and video, have now become more similar and intertwined. Despite this ongoing evolution, many studies

focus on social media at a specific moment in time, without fully addressing the fact that studying social media means studying a dynamic and constantly moving target [33, 55]. In a special issue on persistence and change in social media from 2010, scholars recognized the need to account for these changes, noting: “work in the future will not only be more specific and extensive, but also have the benefit of hindsight [...] Discerning the constant from the variable phenomena in the social media landscape will allow us to push this work even further” [33:313]. In this paper, we pick up on this thread from 15 years ago and use this benefit of hindsight to examine these past years of social media use and ask: 1) What changes can we identify in social media use over time? and 2) How can longitudinal studies be used to examine these changes?

A systematic literature review of research on social media within HCI shows that the area has focused on user behavior, privacy, health, and design interventions [71]. In these studies, questionnaires and surveys were the most popular methods, while interviews and focus groups were second, and the least used methods were trace logs and diary documentation. Only 15% of the studies applied a mixed method approach, yet the authors argue that these articles were the most successful in revealing more than one dimension of social media use [3]. In addition to cross-sectional studies, longitudinal methods have the potential to contribute to our understanding of the evolution of human-technology interaction over time. Kjærup et al. reviewed previous CHI contributions and noted a need for a stronger emphasis on longitudinal research within HCI [46]. They observed that longitudinal studies in HCI are highly varied, with durations ranging from a few days to several years and differing metrics. However, there remains a lack of clarity on what constitutes ‘longitudinal’ in HCI, suggesting that there is still much to explore and define [46]. The aim of this paper is to describe how social media use has evolved over a decade. Against a backdrop of the social media landscape, with the platforms and their particular affordances at a given point in time, we draw out a series of trajectories of change, based on empirical data from a longitudinal qualitative study. In doing so, we aim to unpack the social practices surrounding social media use, deepening the understanding of how users interact with and navigate these platforms in response to shifting affordances and societal contexts. We describe a shift from the initial novelty and exploration of social media, through maturation, monetization and algorithmically curated feeds, to a phase of regulation and growing user fatigue. Finally, we discuss aspects of studying social media as a moving target and the methodological benefits and limitations of our longitudinal, qualitative research approach.



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2 RELATED WORK

Research on social media use has expanded significantly over the past decades, encompassing foundational definitions, evolving practices, and platform-specific studies. Early work by boyd and Ellison [7] provided a seminal definition of social network sites (SNSs), describing them as “web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system.” [7:211] This definition captured the core elements of SNSs during their initial rise but has since been expanded to include features such as networked communication, feeds, and messages [3, 24]. Over time, social media research has moved beyond static definitions to explore the dynamics of user interaction, platform affordances, and their psychological and societal effects. Studies have highlighted the embeddedness of social media in broader communication ecologies [73], noting how users navigate platforms as tools for both mass and interpersonal communication [3]. As platforms have evolved, so has scholarship, from early focus on use of specific sites like MySpace and Friendster [7] to more contemporary examinations of cross-platform practices such as liking, retweeting, and selfie-taking [31, 36, 75]. While this expansive body of work has provided critical insights, much of it has relied on cross-sectional designs, leaving gaps in understanding how user practices evolve over time. For this paper, we address these gaps by focusing on three particularly prominent areas of interest to social media scholars: performative social media use, the distinction between active and passive use, and problematic aspects of social media engagement, three areas central to understanding the trajectories of change observed in our longitudinal data.

2.1 Performative social media use

Performative social media use examines how users curate and present themselves online, often through carefully constructed personas or images. Goffman’s [29] theory of self-presentation has been widely used to understand these behaviors, suggesting that individuals manage their public image to influence others’ perceptions (e.g., [32]). On social media, this often involves selective sharing, where users highlight positive aspects of their lives while omitting less flattering details [14]. This curated form of self-presentation may lead to the performance of an ideal self, aligning with social norms or the expectations of an imagined audience [53]. Zhao et al. [83] further illustrate how platforms like Facebook function as spaces for performance, exhibition, and personal archiving, emphasizing the multifaceted nature of self-presentation. Metrics such as Likes, comments, and shares reinforce this performative behavior by providing indicators of social validation, prompting users to adjust their content to maximize positive feedback [83]. While previous research has explored performativity as a static phenomenon, it has rarely examined how users’ self-presentation evolves over time. This paper addresses this gap by tracing longitudinal changes in users’ approaches to performative engagement, highlighting shifts from public to private interactions.

2.2 Active versus passive social media use

The distinction between active and passive social media use has been central to understanding social media engagement and its implications. Active use refers to behaviors such as posting, commenting, and sharing content, which require a more direct interaction with the platform and other users. In contrast, passive use includes activities like scrolling through feeds or reading posts without directly engaging with the content or other users. Previous work suggests that active use can lead to positive outcomes, such as increased social capital and a sense of belonging [9], whereas passive use has been linked to negative psychological outcomes, such as envy, loneliness, and reduced life satisfaction [77]. Further unpacking the dichotomy between passive and active use has been done by Ellison et al., who distinguishes between interaction that generates a visible trace to other users, for example by liking or commenting a post, as opposed to only viewing or lurking without interacting [25]. Related to this is the distinction between producing and consuming content, with producing involving creation and sharing, while consuming refers to passive browsing. Studies like those by Kaplan and Haenlein [44] highlight that social media platforms enable users to transition from passive consumers of media to active producers, contributing to the democratization of content creation. However, the rise of the ‘prosumer’ culture, as discussed by Ritzer and Jurgenson [67], blurs the line between these roles, with users often simultaneously consuming and producing content. Prior work has primarily examined active and passive use through cross-sectional studies, often neglecting the longitudinal dynamics of how users transition between these modes over time. This paper contributes by documenting and analyzing users’ shifting behaviors, specifically the trajectory from active content creation to passive consumption.

2.3 Problematic aspects of social media use

In recent years, problematic aspects of social media use have emerged as a topic of popular discussion and scholarly attention. Problematic social media use is often characterized by excessive time spent on platforms, difficulty controlling usage, and interference with daily responsibilities [10]. Cheng et al. found that users experiencing negative impacts from their social media use also reported a loss of control, highlighting the complex interplay between perceived agency and negative consequences [13]. Much of the existing research in this area stems from psychology and related disciplines and relies on cross-sectional self-report studies, which examine large populations at a single point in time (e.g. [63]). However, such studies often struggle to capture the nuanced, evolving relationship between social media use and well-being over time. It is increasingly recognized that the methodological choices that have shaped research into the effects of social media on well-being, are in fact hindering conclusive conclusions regarding relationships between social media and well-being, and that there is a need for the use of longitudinal approaches that can provide richer insights into these dynamics [39, 45, 64]. Although the impact of problematic social media use has been extensively studied, little attention has been given to how these perceptions and behaviors develop. By employing a longitudinal design, this paper reveals how users’ attitudes towards problematic use shift over time.

3 BACKGROUND: A changing social media landscape

This background section provides an overview of the evolution of the social media landscape over the past decade, highlighting key events, developments and transformations in user practices and platform affordances. By providing snapshots of the social media landscape from the same points in time as we collected our data, i.e. in the years of 2012, 2017, and 2022, we trace social media use from its early days of rapid growth and novelty to a more mature and regulated environment. This overview sets the scene for understanding the broader context in which social media use has evolved over time.

3.1 2012: Novelty, exploration and growth

In 2012, the social media landscape was characterized by novelty, exploration, and rapid growth. Social media platforms, at the time often referred to as social networking sites (SNS), were continually evolving, with new entrants vying for attention and older ones being phased out. At this time, the estimated number of social media users was substantial, with a significant portion of internet users, particularly those under 50, actively participating on social networking sites [65]. The major SNS in 2012 included Facebook, which reached a milestone of 1 billion users in October [76], Twitter, which surpassed 200 million users in December [66], and Instagram, which was still primarily considered being a ‘photo-sharing application’, rather than a full-fledged SNS. Instagram saw a significant increase in its user base, growing to approximately 27 million users by March 2012 [17], just before its acquisition by Facebook in April of that year [69]. The rise of mobile devices, particularly smartphones and tablets, played a crucial role in this expansion. Social media usage on mobile devices surged as platforms like Facebook and Twitter introduced apps with enhanced features designed to cater to the mobile audience. This shift towards mobile was a significant development, as it allowed users to stay connected and engaged on social media throughout the day, contributing to the platforms’ growing popularity. Each SNS had its niche: Facebook dominated with its multimodal capabilities, allowing for a mix of text, images, and video; Twitter remained primarily text-oriented but allowed photos, and Instagram emphasized visual content. Importantly, in 2012, content on these platforms was still presented in chronological order, giving users a sense of real-time interaction and engagement. This period also marked the height of social media as a stage for public performance, where the number of Likes and followers became a currency for social validation [20, 54]. The act of sharing that characterized this time was intertwined with a desire to project an idealized self-image, one that resonated with a broad and sometimes impersonal audience [4, 53].

3.2 2017: Maturation, monetization, and algorithmic feeds

By 2017, the social media landscape had matured, with monetization and algorithmic curation of content given an increased focus. Facebook, now well-established as the dominant player, had grown to over 2 billion monthly active users [27]. Instagram, which had been integrated into Facebook’s ecosystem, saw explosive growth,

surpassing 500 million daily users by the end of the year [26]. Twitter, while still influential with over 330 million active users, began to face challenges in user growth and engagement compared to its peers [79]. A major shift during this period was the widespread adoption of algorithmically curated feeds across platforms. Facebook, Instagram, and Twitter all moved away from the chronological presentation of content, opting instead for algorithms that prioritized posts based on user engagement and relevance. This change was likely driven by the platforms’ intention to increase user retention and maximize revenue. However, as DeVito et al. (2017) noted, this shift sparked significant resistance from users, such as the #RIPTwitter movement, where users expressed their frustration over losing control of their feed to algorithms [19]. Concerns were also raised about the so-called ‘filter bubble effect’ [23], where users are assumed to be increasingly exposed mainly to content that align with their interests and beliefs, potentially limiting their exposure to diverse viewpoints. Monetization also became an emphasized focus for social media companies during this time. Facebook and Instagram introduced new advertising formats, including video ads, sponsored posts, and Stories ads [35] which allowed brands to reach users in more engaging ways. Influencer marketing also became more prominent, with brands leveraging popular users on Instagram and YouTube to promote products and services to their followers. In the early days, social media was mainly populated by amateurs, early adopters and individuals who shared their everyday lives and random thoughts with spontaneous and authentic amateur content, resonating with others who were using social media in a similar way. However, over time, social media platforms became fertile ground for professional content creators, including influencers, brands, and media companies. These entities began producing and sharing highly curated and polished content designed to engage audiences on a large scale, most likely impacting the shifting social dynamics of these platforms, as the original peer-to-peer sharing ethos had given way to a more professionalized and traditional model of content production and consumption [21, 61]. As social media became more commercialized, users began to express mixed feelings about the increasing presence of ads and the platforms’ focus on profit over user experience. At the same time, the rise of features like Instagram Stories, Snapchat, and WhatsApp’s private messaging illustrated another trend central to this period. The temporary nature of Instagram Stories, for example, offered a way to share content without the long-lasting implications of a public post. These platforms and features now catered to a growing preference for ephemeral and private communication, where users temporarily could share moments with only a selected group of followers and marked a significant departure from the early days of social media, where the primary goal was often to attract public attention, feedback, and interaction from a wide and often undefined audience [53].

3.3 2022: Regulation, diversification, and user concerns

By 2022, the social media landscape had undergone further transformation, marked by increased regulation, diversification of platforms, and growing user concerns. Facebook, while still a major player with nearly 3 billion users [47] was facing declining user

engagement, particularly among younger demographics [59]. Instagram continued to grow but faced stiff competition from newer platforms like TikTok, which had rapidly gained popularity, especially among Gen Z users, surpassing 1 billion users in 2021 [51]. Twitter maintained a steady user base, but its influence was increasingly concentrated among specific niches, such as politics and journalism. A significant trend in 2022 was the increased scrutiny and regulation of social media platforms. An important event that raised awareness about privacy and data integrity on social media was the Cambridge Analytica data scandal [85] in 2018, which involved the misuse of data from up to 87 million Facebook users. In 2022, governments around the world had begun to impose stricter regulations on how social media companies handled user data, misinformation, and harmful content. The European Union’s General Data Protection Regulation (GDPR) had set the stage for more stringent data privacy laws, influencing global standards. Platforms were also under pressure to address the spread of misinformation and harmful content, leading to increased content moderation and the implementation of fact-checking measures. Diversification of social media platforms was another key development. While Facebook and Instagram remained dominant, platforms like TikTok, Snapchat, and Discord carved out substantial niches by offering different modes of interaction and catering to specific audiences. TikTok’s short-form video content, in particular, resonated with users looking for entertainment and creative expression, while Discord became popular for community-based interactions around gaming and other interests. By 2022, user concerns about social media use became increasingly apparent, with digital detoxes and reduced screen time more commonly reported in the news media as users sought to regain control over their time and attention [12].

4 Method: Qualitative longitudinal research

This study is part of an ongoing qualitative longitudinal research project examining social media use since 2012. Qualitative longitudinal research (QLR) is particularly suited for exploring change over time [2, 70]. We initiated our study in 2012, ethnographically inspired by Richard Chalfen’s work on a related technology-mediated social practice, i.e. social photography. Chalfen emphasizes the importance of understanding *how* people create, share, and interact with images, rather than focusing solely on *why* they do it [11]. Similarly, Dourish argues that a great value of research often lies in deepening the understanding of users’ practices and contexts, rather than directly guiding the design process [22]. Building upon these perspectives, focusing rather on the practice than neither motivations nor implications, our data set comprises data collected in 2012, 2017, and 2022, offering a decade-long perspective on users’ experiences and perceptions of social media.

4.1 Data collection

The data analyzed in this study were gathered through in-depth, semi-structured interviews that were video-recorded and conducted using a stimulated recall approach. These interviews, conducted with a small group of social media users, generated around 36 hours of video recordings and 750 pages of transcribed material. The interviews took place in three waves, in the years 2012, 2017, and 2022. Inspired by Dempsey’s [18] stimulated-recall technique,

the approach involved showing participants previous posts and selected video snippets from prior interviews. This technique aims to evoke detailed reflections and link responses to specific moments or content, as visual prompts such as photos and videos are assumed to bring participants closer to the moments when they initially produced these actions [18].

4.2 Participants

When initiating the study in 2012, 16 active Swedish social media users were recruited to explore general social media use, with a particular focus on social photography in a museum setting. Of these participants, eleven were women and five were men, ranging in age from 19 to 38. Three participants were students, while the remaining 13 were employed in various professions. The majority were active users and either had jobs or were pursuing training in media, marketing, journalism, or related fields, indicating a pre-existing interest in social media as a communication tool (see Table 1). Eleven of the original sixteen participants were successfully re-recruited for interviews in 2017 and 2022. The data collection has been conducted adhering to the most recent version of Association of Internet Researchers (AOIR) ethical research guidelines available at that time. In applying these guidelines, we ensured participants completed informed consent forms before the initial interviews, provided the option to withdraw at any time, and for anonymized usernames when referencing excerpts, screenshots, and photos in our writing and presentations.

4.3 Analytical approach

Our analysis follows a multi-stage approach designed to trace changes in how our participants have articulated their social media use over time. Kjærup et al. [46] emphasize that in longitudinal research, it is crucial to clearly distinguish between different aspects of change, such as the level of change of interest, average group change, intraunit change, and interunit differences in intraunit change [4]. In addition to these points, our analytical approach was informed by methodologies described in Vogl et al. [78] and Lewis [48], which emphasize the importance of identifying and interpreting different types of changes within longitudinal qualitative data. Following Vogl et al., we focused on tracing the following forms of change:

- Narrative change: The unfolding of individual stories across time, capturing how participants’ experiences and accounts evolve.
- Participant reinterpretation: The rethinking or retelling of experiences and feelings described in earlier interviews, including both explicit and implicit reinterpretation.
- Researcher re-interpretation: The analysis involves the researchers’ evolving understanding and interpretation of the participants’ narratives over time.
- Absence of change: Instances where participants’ narratives remain consistent across the ten-year period, which is equally significant in understanding the stability of certain perceptions.

Table 1: Participants

Informant	Gender	Age 2012	Occupation 2012	Age 2017	Occupation 2017	Age 2022	Occupation 2022
1	F	19	Shop assistant	24	Student	29	Journalist
2	M	27	Information officer	32	Project manager	37	Business analyst
3	F	27	Home care worker	32	Medical secretary	37	Medical secretary
4	F	26	Student	31	Teacher	36	Planning officer
5	F	29	Journalist	34	Journalist	39	Student
6	F	31	Copywriter	36	Copywriter	41	Copywriter
7	M	28	Group home worker	33	Marketing manager	38	HR specialist
8	F	23	Student	28	Purchaser	33	Purchaser
9	F	29	Marketer	34	Marketer	39	Team manager
10	F	26	Student	31	Social media team leader (parental leave)	36	Communications manager
11	M	38	Digital producer	43	Strategic digital producer	48	Strategic digital producer
12	F	28	Consultancy support	*	*	*	*
13	M	30	Art director	*	*	*	*
14	F	24	Insurance agent	*	*	*	*
15	M	29	Student	*	*	*	*
16	F	27	Marketer	*	*	*	*1

4.4 Analytical procedure

Building upon this framework for identifying change, the primary focus of the analysis for this paper was to trace and explore both intraunit change and interunit differences within intraunit change in narratives of social media use at both individual and group levels. This involved examining 1) participants' narratives at specific time points, 2) tracing their involvement as a group over time, 3) tracing the participant individual development over time, and 4) analyzing how these narratives linked to broader trends in evolved social media use discourse. The analytical procedure involved conducting:

- Case profile analysis for each interview: Each of the 33 interviews conducted (eleven per wave) was first analyzed individually, creating detailed case profiles that captured the details of each participant's social media use at a given point in time.
- Cross-sectional analysis of each wave: The case profiles from each wave of data collection (2012, 2017, and 2022) were then analyzed collectively to identify common themes and patterns from each wave, related to the four kinds of change we were coding for, identified above, resulting in three wave case profiles, one for each wave.
- Longitudinal case analysis: For each participant, a longitudinal case profile was developed, tracing their individual narratives and experiences across all three waves of data collection, resulting in a total of eleven longitudinal case profiles.

- Comparative longitudinal analysis: Finally, a comparative analysis was conducted between each of the eleven individual longitudinal case profiles and the three wave case profiles to explore how individual trajectories related to the overarching thematic group narratives and the collective involvement of social media narratives over time, resulting in 33 comparative analyses.

Following each of the three data collection waves, the interviews were transcribed, and the data were coded and categorized using the CAQDAS software NVivo, following the framework for thematic analysis [8]. The full data set was analyzed following the last data collection in 2022, using the described comprehensive longitudinal intraunit and interunit analysis. The first author conducted the initial analysis within each of the four phases, which was iteratively refined through feedback from the second author, resulting in increasingly fine-grained categorization. While previous analyses of selected portions of the material have offered a partial and fragmented understanding of the data [37, 38, 40–43, 80], the holistic analysis conducted for this paper specifically focuses on tracing changes over time, which has not been explored in other work.

4.5 Researchers' reflection on the evolution of the study

As part of the methodology, a brief account is necessary regarding the interview question setup for this longitudinal endeavor. An initial semi-structured interview guide was constructed and used in 2012. Prior to the data collections in 2017 and 2022, the interview

guide was revisited and slightly revised to cover the greater technological and societal evolutions of social media platforms that had occurred during the time in between interviews. The initial data collection was designed as part of a study aiming to explore social photography in a museum context, why a great number of questions on the interview guide in 2012 were context specific. Also, in the 2012 interviews, questions focused more on operative aspects of social media use, leading participants to provide reflections on “good” photos, social norms, and feedback. By contrast, the 2017 and 2022 interviews were, due to the methodological approach, conducive for retrospection and shifted toward more reflective and general discussions on social media use, comparing past and present practices. This included a review of participants’ recent social media activities, both through explicitly formulated questions asking the participants to reflect, but also by the participants themselves referring to previous interviews and their previous use of social media. By continuously revising the interview guide prior to each wave, we allowed for reflection that deepened understanding of the phenomenon, the changing nature of social media practices, and let that influence the line of questioning in subsequent interviews. This reflexive approach allowed us to adapt to new insights and emerging trends in social media use, ensuring that the interviews remained relevant and probing throughout the study.

5 Trajectories of change in social media use

In our background section, we outlined a social media landscape that has transformed over the past decade, evolving from rapid growth and novelty that characterized its early days to becoming a more mature and regulated environment. Building on this overview as a backdrop for understanding the broader context of social media’s evolution, this section presents three distinct trajectories of change identified in our entire data set. These trajectories highlight shifts from public to private interactions, from active content creation to passive consumption, and from enjoyment of social media to feelings of fatigue. We begin each subsection with giving an overview of a trajectory, describing how users’ behaviors and motivations have adapted in response to platform design, societal trends, and personal experiences, and then illustrate each trajectory by describing a specific case.

5.1 Trajectory 1. From public to private: the shift from performing to keeping it close

5.1.1 Overview of the trajectory. As highlighted in our background section, social media use has undergone a profound transformation over the past decade, including a shift from predominantly public, performative interactions to more private modes of engagement. In the early 2010s, social media platforms like Facebook, Instagram, and Twitter were primarily spaces where users publicly broadcasted their lives, actively seeking visibility and feedback from a wide audience. The performative nature [32, 84] of these interactions was evident in our data collected in 2012 in the way users curated their profiles, carefully selecting content that would garner Likes, shares, and positive feedback. However, as social media evolved, so did user practices. By the mid-2010s, a shift began to take shape. Emerging in the interviews collected in 2017, and especially noticeable in the

data collected in 2022, users started to express concerns about constant public visibility and the performative expectations that came with it. The initial allure of wide-reaching audiences had begun to wane, giving way to a growing desire for less public interactions and more private and selective forms of communication. Users became more reluctant to share personal details with a broader public, opting instead for smaller, more intimate circles.

By 2022, this shift toward private engagement became even more pronounced. In the interviews conducted in 2022, users more often than before described using social media to “scroll” and “check in on other people’s stories” rather than talking about actively creating and posting content themselves. This way of using social media reflects the broader trend of disengagement from the performative aspects of social media. When they did share, it was more often than before in private chat groups or through direct messages, or in other digital spaces where the audience was carefully selected. The decline in public posting suggests a growing awareness and selectivity about whom users share their lives with and can be seen as a response to the increasing complexity of managing one’s online identity and the potential pressure associated with public performance. Over the years, the act of sharing has become more intentional, with a preference for sharing in environments that offer greater control and intimacy, such as direct messaging and group chats. As users have become more aware of the implications of public sharing, there has been a marked shift towards more private and selective forms of interaction. This shift not only reflects changes in user behavior but also highlights broader cultural trends towards digital privacy and a desire for more personal interactions in the digital age. This trajectory illustrates a shift away from the performative aspects of early social media use, where users sought broad visibility and Likes, toward more private, selective sharing within smaller, exclusive circles, reducing public engagement. To illustrate this trajectory, we turn to Robert (Informant 2).

5.1.2 Case, trajectory 1: Robert. In 2012, we interviewed Robert, a 27-year-old communications officer. He described himself as checking his friends’ activity on Instagram more frequently than creating and posting content, though he did admit to posting quite a lot himself as well. He reported checking Instagram “at least three times per day at least, up to any number of times”. When asked about the frequency of his own postings however, he said:

“Uhm, I try to put out at least one picture a day, sometimes it’s a lot more but one picture a day that’s like, I have thought that like, you must treat those who follow you to some pictures.”

During the 2012 interview, Robert expressed his desire to increase both the number of Likes on his posts and his follower count. He explained how he used hashtags to extend the reach of his content, aiming to connect with users beyond his immediate follower base. When meeting again ten years later, Robert talked rather differently about his use of social media and motives behind it. He mentioned ‘exclusivity’ several times throughout the interview in 2022, referring to different aspects of his social media use. For instance, he said:

“I get a sense that you have already seen it before when I check Instagram, it feels as if I have seen this

14 times even though I haven't, but it doesn't feel that exclusive anymore."

Later during the interview, he again referred to the notion of exclusivity as he said:

"We have talked about this in some like friend groups that we should start using shared albums instead because, yeah well, it gets more exclusive somehow".

During the 2022 interview, the theme of exclusivity was prominent, with Robert frequently returning to this notion throughout the conversation. When asked to unpack his thoughts on exclusivity at the end of the interview, he explained that sharing content within a smaller circle adds an extra layer of value to him. Elaborating on the differences between publicly shared images and those shared in more private spaces, he emphasized the intimacy of the latter, stating:

"You know somehow that these pictures, we are watching them here and now, it's not something that is being shared with anybody [...] this is something that only we share, just us"

As the interview was coming to an end, he was being shown and asked to comment on a snippet of video recorded in 2017, of himself watching a short snippet from the interview recorded in 2012 where he was reasoning around his use of hashtags as a way to reach people beyond his immediate followers. Commenting on his statement from 2012, he said:

"It sounds to me like I was much more interested in other people finding my pictures and me getting Likes and whatever and now [...] it's a bit like, as I already mentioned today, it was much more important that others found my photos and that you got more Likes, now you want to share more exclusively or even show on the phone [...] when someone is sitting next to you, you can show even a little more pictures then so that has really changed"

When asked to elaborate on reasons for why it is important to him to keep it more exclusive, he said:

"Well partly, I myself think that it is more fun to see something more exclusive when no one else has seen it. I also think it gives me more if you can actually show and talk in person [...] And I don't have to constantly show everyone that I have a lot of fun. I know about it myself and that's what's important in a way I guess"

As Robert was reflecting upon how he previously used social media, what stood out was a difference in how he related to the co-presence of others in his social media use in 2012 as compared to in 2022. In 2012 he talked about "trying to treat his followers" by posting at least one picture a day and gaining Likes and followers, whereas in 2022 he was more concerned with keeping his postings "exclusive" and sharing them with a smaller circle. He did not seem as eager to please his followers in 2022, but instead seemed more oriented towards fulfilling his own will to share experiences and being less concerned with "treating" his followers.

Another point to draw from Robert's case relates to the concept of "liveness". In the early days of social media, liveness referred to

publicly sharing experiences in real-time with friends and followers [80]. A decade later, however, a different kind of liveness has emerged, centered around more intimate, shared experiences within smaller circles and in non-digital spaces. While in 2012, liveness was about broadcasting the present to a wide audience, by 2022, it had shifted toward sharing experiences with a smaller, more synchronized, private group, whether in digital spaces (like closed chat groups) or non-digital spaces (such as showing photos directly to someone sitting beside you).

5.2 Trajectory 2. From active to passive: the shift from producing to consuming

5.2.1 Overview of the trajectory. The second trajectory highlights the shift from active content creation and frequent sharing of everyday life on social media to a more passive engagement focused on consuming content, especially from the increased number of professional creators. As mentioned in the previous section, the social media landscape of the early era was characterized by a sense of immediacy and liveness, often driven by the novelty of the platforms and the excitement of connecting with others in new and interactive ways, with amateur users frequently posting status updates, photos, and comments in real-time [80]. However, as social media matured, user practices evolved and a clear shift from content production to consumption emerged. Users began moving away from actively creating content and instead focused more on consuming what others, often professional content creators, produced. This rise of passive consumption fundamentally changed the nature of social media interaction, transforming it from a participatory experience to one that centers primarily on media consumption.

One factor that may have contributed to this shift was the growing professionalization of content creation on social media. As the social media landscape became dominated by professional content creators, the space for casual, everyday users to contribute their own content took on a new form, leading many to transition from active creators to passive consumers of professionally produced material. This professionalization might also have altered users' perceptions of what content was worth sharing. As social media feeds became inundated with high-quality, visually appealing posts from influencers and brands, everyday user content became less frequent. From our data, there are indications that the decline in personal content production was a result of amateur users no longer finding the same room for everyday content anymore, and that users became more self-conscious about what they shared and how it would be received.

The emergence of new ephemeral content formats did temporarily revive the idea of liveness in social media. In the interviews conducted in 2017, these formats were mentioned as having offered new ways to share moments in a more spontaneous and less polished manner, which initially encouraged more frequent and active posting. However, by 2022, the decline in active engagement had become even more pronounced. Our informants by then frequently described their social media activities in terms that reflected a decrease in intensity, frequency, and overall engagement, with phrases like "less active", "not as active", and "interacting less" commonly used to describe their use. Several participants reported that they no longer felt the same interest in posting or interacting as

they had done in the past. For example, some users noted that they had gone from checking notifications and posting updates daily to only doing so weekly, or even less frequently. One participant remarked, "Before, social media was much more about interacting. It happened all the time. If I got a notification, I would check it immediately, now I have no notifications on, I have turned them off". Another one commented: "Before, I used to write a status update every day, and now I barely know how to do it anymore".

These reflections underscore a trend of disengagement from the active production of content. The shift from frequent, active participation to infrequent, passive consumption illustrates a second trajectory of change in social media use over the past decade where many users have moved away from being creators of content to becoming observants and consumers of a more curated experience. As users continue to adapt to these evolving dynamics, it is likely that social media as we know it will increasingly become a space for observation rather than participation, further solidifying the role of professional content creators as the primary drivers of production and engagement on these platforms. While the professionalization of content production is one aspect possibly explaining the decline in less active amateurs in 2022, what seems to be central from our interviews is also an awareness of the smartphone as a potential intrusion in the physical space and social context, possible also explaining the decline in posting and less frequent documenting and sharing. To illustrate this trajectory, we look at the case of Emily (Informant 8).

5.2.2 Case, trajectory 2: Emily. In 2012, Emily was a 23-year-old female student who described herself as a "very active" social media user who:

"...check relatively often, it's several times a day that I go in and look but I do not post every day. I'm like, I can check up on what my friends post, press some Likes, maybe do a quick search and then I close the app and then maybe I check three, four hours later again".

When returning to participate in the interviews for 2017, Emily still described herself as "active" yet also admitted that she did not "post as much to the extent that maybe [she] did in the past". In 2022, as she was being shown the snippets of video from sections of the interview that took place in 2017, she described a shift in her social media use of 2017 in comparison to her use of 2012. She recognized that while her previous active use might have been fun, it might also have been disturbing to some. She said:

"Well now, in retrospect, it's like, of course, I get it, and I can recognize myself in that I could pull up my phone, mid-conversation. And like. It's like I've become much more aware of what I do, if I'm with a friend, I don't sit with it up. I flip it, I might look if it would vibrate, then I could turn it up, if it's not any emergency, then turn it back down, away and then maybe check if the person goes to the toilet or something if I want to scroll through it quickly."

She elaborated and described "trying to scroll through a couple of times per day" in 2022 but mostly "saving it for when you are on the bus, have time, and aren't engaged in a conversation or stand

there talking to a friend or something so definitely having become more aware because I can agree that that is really f-ing rude".

During the interviews in both 2012 and 2017, Emily painted a picture of an intertwined relationship between her and her social media accounts and followers. This was especially prominent in 2012 when she mentioned checking up and commenting on her friends posts as well as checking for Likes and responding to comments on her own content frequently throughout the day. In 2022 however, she seemed to have developed a different approach towards keeping up to date with those she followed and the feedback she got. In the interview conducted in 2022, she described a way of catching up that differed from how she previously described her use in terms of "checking" social media:

"If I haven't been on Twitter since the night before and it's like 400 new tweets then you know, I don't bother reading, I just tap the clock, and it scrolls up to the latest tweets and then it's like yes this is where we start the day"

With this statement, she described how, in 2022, she would catch up by tapping the clock at the top of her iPhone screen, which would automatically scroll the feed to the most recent tweets, rather than manually scrolling through and reading the 400 tweets posted since she last checked. When she was being shown a snippet of video in 2022 from her interview in 2017 where she was reasoning on her decreased social media use at the time, she made a general reflection on how her use had evolved over the last decade:

"If I look at like 2017, then maybe today in 2022 I can think that yeah well the Emily of 2017 did still post quite a lot of stuff, even though it was less than the Emily of 2012 did, but from 2017 until today, I think it is even less".

Emily's case exemplifies this trajectory by highlighting a shifted approach to being present and active on social media. In 2012, she was highly active, frequently checking social media and defending her use to others who viewed her engagement as excessive. By 2017, while she still considered herself active, she recognized a decrease in her posting frequency and a shift towards more passive consumption of social media. By 2022, Emily had further reduced her activity, having become more selective about when and how she engaged with social media, often prioritizing passive browsing over active posting and presence.

5.3 Trajectory 3. From fun to fatigue: the shift from keeping up to giving up

5.3.1 Overview of the trajectory. Related to describing being more or less actively producing and present themselves, our informants also often touched upon the notion of keeping up with others. While the previous examples illustrate a shift in how users engage with social media, from being highly active and performative to adopting a more selective and mindful approach, this trajectory focuses on the evolving balance between enjoyment and the increasing effort required to maintain engagement, ultimately transitioning from keeping up to stepping back. The third trajectory illustrates how, between 2012 and 2022, social media use shifted from emphasizing fun, leisure activities and staying connected with friends and family,

to becoming more centered on effort and management. In the early years, platforms like Instagram and Facebook were described as being fun and exciting, offering users new ways to document and share moments from their everyday lives. In our data from 2012, the practice of taking photos, editing them, applying filters, and sharing them with friends was described as both entertaining and creatively fulfilling. Our earliest data from 2012 reflect a collective enthusiasm for this emerging mode of communication, with our informants actively participating in a growing digital culture and finding joy in engaging in documenting, sharing and interacting around snapshots of their everyday lives through comments, shares and Likes.

However, by 2017, signs of concerns and fatigue had begun to emerge, visible in the descriptions made by our informants at that time. Several of the participants of our study expressed awareness of the need to manage their social media usage and referred to implications of constantly trying to keep up. The initial excitement had worn off, and what was once a liberating way to connect was described as more burdensome. The constant flow of information and the pressure to remain engaged with a never-ending stream of content became overwhelming for some.

By 2022, this shift had become even more pronounced. The way the informants expressed themselves in interviews from that year reflected a clear transition from leisure engagement to a more managed and conscious use. Social media use had now become an activity to be managed and regulated. The excitement visible in the interviews in 2012 had been replaced by a more managerial approach, with users having become increasingly aware of difficulties and problematic aspects of their social media use. They expressed a need to limit screen time, avoid endless scrolling, and protect themselves from negative possible impacts such as stress and anxiety, in a way they had not done in the previous interviews. This transition from enjoyment to management is a critical aspect of social media's evolution. What began as a novel and fun way to connect with others gradually turned into a task that in addition to being joyful, also required some regulation. In 2022, informants described how they had gone from eagerly wanting to keep up with social media content to eventually stepping back and sometimes even giving up on even trying. The overwhelming flow of information and the realization that social media could be more consuming than fulfilling had led some to reduce their social media use or even abandon certain accounts and platforms.

This trajectory illustrates a third shift in how people interact with and through social media. The initial phase of enthusiasm and active engagement had given way to a more reflective and regulated use in 2022. Our informants had become more selective about how and when they engage with social media, often describing having tried to reduce their usage, reflecting a growing awareness of the impact social media can have on people's lives, leading to a more cautious approach. Several of our participants described a movement where what began as a fun, novel, and engaging activity transformed into a complex practice that required management and regulation. As users became more exposed of the potential negative effects of social media, they started to withdraw from the constant cycle of content production and consumption, choosing instead to limit their engagement and protect their mental well-being. This shift from enjoyment to management underscores a wider shift in

how people relate to social media, marking a move towards a more mindful and controlled approach to digital interaction. The initial fun of social media gradually gave way to a more cautious approach as users became more aware of its demands, leading to a significant change in how people approach their digital lives. The sense that social media was consuming too much time was not new in 2022, but explicit reflections on actively managing time spent on these platforms emerged more strongly in these later interviews. Several informants mentioned wanting to regulate their usage as early as 2012, with some already having made some adjustments by 2017, though the practice of consistently managing usage became even more prominent in 2022. To illustrate this trajectory, we turn to the case of Paul (Informant 11).

5.3.2 Case, trajectory 3: Paul. At the time of the interview in 2012, Paul was a 38-year-old digital producer at an advertising agency with a keen interest in both amateur and professional photography. During his first interview, he discussed his habit of frequently taking and sharing photos on Instagram. He said:

“I enjoy the quickness to it, to see something, capture it, edit the picture and share it. Because it's very social, I think. Instagram is incredibly fun that way. In like, 'look at this funny thing I saw'.”

At that time, Paul had been using Instagram for almost a year and was heavily invested in his social media activities, checking the app “a few times per hour, probably way too much.” He described posting “four to five pictures maybe” on a regular day, although he also admitted that he had “some kind of ambition to at least make one post every day”. At one point in the 2012 interview, Paul talked specifically about his Twitter use, which had recently declined. He had noticed that Twitter had become a “time thief” due to the “incredibly many” posts in his feed as he then followed around 300 people. This led him to consider reducing the number of people he followed, although he had not yet found a “sensible system for trimming”. He explained that “after a while, you just think that it takes too much time to go through [...] if you miss a couple of hours then it takes you like ten minutes to go through everything and then it takes too much time, then it starts to intrude on like work and other stuff that you need to do.” This desire to manage his social media use hinted at an awareness of the time and attention these platforms were consuming. It is important to note that during this period, the platform, still known as Twitter, only displayed tweets in chronological order. This meant users saw all posts in their feed without any algorithmic sorting or curation based on their interests or needs. Despite this, Paul's reflections indicate a desire to regain control over his social media experience. He elaborated on this by describing the “weirdly constructed guilty conscience” that arose from trying to keep up with the constant influx of content, acknowledging the challenge of managing this behavior.

Fast forward to 2017, and Paul had made some changes in how he managed his social media use. He had now separated his interests by creating two separate Instagram accounts instead of one, which allowed him to better organize his content. Reflecting on his earlier practices, he said:

“When we met the last time, I had one account for everything and it was like snaps from the day or like funny pictures you saw out on the town or if you were just out walking around and then there was like pictures I took off when I was yeah, shooting people with a system camera in a studio with lights and everything. Now I have separated those two so that my first handle [...] is more of a visual diary in like, that is where I put stuff that yeah like it is my photo album basically, yeah, it’s, stuff that I want to remember end up there.”

During the same 2017 interview, Paul was also shown a video snippet of his 2012 interview, where he discussed the emerging, yet still not as strong, guilt he felt about not keeping up with social media and his efforts to manage his Twitter feed. When asked if he still agreed with those statements in 2017, Paul responded:

“Yeah, I do but uhm the guilty conscience is no longer there. And I think that partly has to do with that you have just accepted that you cannot see everything. And also, that they have, that these algorithmic feeds, from being, showing everything chronologically to uhm that they try to sort what they think I want to see so that means that I will never be able to get back to where I was the last time but instead, I always get new content. It also means that you can never be sure that you see everything [...] You can never get back to where you left off the last time.”

Five years later, by 2022, Paul had taken even more drastic steps to regulate his social media use. He explained that he had “actively tried to decrease his social media use and has actually managed to do so drastically,” with his total usage reduced to “barely an hour” compared to much higher amounts of time spent on social media in previous years. Paul described “consuming” social media “a few times per day” often when he had idle moments, such as waiting for his son to finish eating. He detailed the measures he had taken to gain control over his usage, saying he had “removed all the [app] icons from all screens on the phone and then I added only the apps I actually use,” calling this process a “detox.” He added that he aimed to “sabotage the muscle memory” that led him to unconsciously open apps, acknowledging how easy it was to “just go in click click and then you were in the feed and then it was 10 minutes.” Additionally, he described having turned off all notifications to avoid being “misled into this time waster hole.”

During the 2022 interview, Paul was shown a video snippet from his 2017 interview, in which he reflected on his social media habits in 2012. By 2017, he had already begun expressing concerns about his social media use, having described Twitter as a “time thief” and admitting that his Instagram activity was “probably way too much.” Reflecting on his social media use in 2022, Paul noted that it had become “less frequent now, definitely.” His experience illustrates a trajectory from actively engaging with and enjoying keeping up with social media feeds to feeling increasingly overwhelmed by the sheer volume of content. Over time, Paul took deliberate steps to reduce his social media presence, including turning off notifications, removing app icons, and engaging in what he called a “detox”. His journey highlights a larger movement of users recognizing the

impact of social media on their time and mental well-being and taking conscious action to mitigate its effects.

6 Discussion

In this section, we return to our research questions by first examining the implications of the identified trajectories of change in social media use for HCI researchers, and then discussing how longitudinal studies can be employed to study these changes.

6.1 Design considerations for evolving social media practices

This study explores how users’ narratives around social media use have evolved over the last decade. Through an analysis of qualitative longitudinal data, we identified that while users were initially enthusiastic about social media and engaged in active, public interactions, over the years they increasingly described their use as passive, private, and time-consuming. Our data illustrate how social media use evolved from public performance to more intimate, selective interactions and from active content creation to more passive consumption. The trajectories we identified emphasize the need for HCI researchers and designers to rethink how social media platforms support different types of interaction, and we propose a few considerations to bring forward for the HCI field and future research.

6.1.1 Designing for user agency and control in selected spaces. The shift from public, active engagement to more private, selective interaction highlights a critical area for HCI: designing forms of interaction that prioritize user agency and control. Integrity and selective sharing are becoming more central to the user experience, as shown by the first trajectory. Users increasingly seek ways to interact within smaller, exclusive circles, indicating the need for tools that support private, controlled sharing. Features like customizable sharing lists, shared albums, and clearer audience selection controls can empower users to engage on their own terms. Related to the concerns described in the section covering the third trajectory, Hossain et al. note that while features designed to facilitate social media breaks can promote recovery, they also risk encouraging procrastination, underscoring the importance of balancing these elements [34]. Lyngs et al. demonstrate that design interventions on platforms like Facebook can effectively reduce distractions and enhance focused engagement, aligning with the need for selective, private sharing [50]. The second trajectory, capturing the shift from content creation to content consumption, highlights the opportunity to lower barriers for participation. This shift is visible in the rise of ephemeral content. Simplifying content creation and sharing through features like ephemeral content or casual sharing options seems to reinvigorate users’ active engagement [49]. By designing tools that promote spontaneous sharing and lower the pressure for perfection, platforms can encourage users to return to more active participation. Users’ desire to “trim down” their social media use, as expressed by Paul, reflects a need for more effective engagement and management of time. The impact of this trajectory is already visible in contemporary design of social media platforms, where there is a growing number of opportunities for users to control and track time spent on platforms, options for customizing feeds, and enhanced privacy controls that allow users to choose

what they see and how they interact. Moderate and meaningful interaction design has been suggested as a way to address some of these concerns [81]. In a thought-provoking example, Widdicks et al. suggest ways to imitate the negative effects, including speed bumps that will slow down internet connection and the stripping of layers to contain content that is meaningful to users. The latter has also been suggested in designing social media for senior adults, who preferred to keep their feeds simpler to prioritize interaction [28]. However, as Widdicks et al. discuss, these alternative simpler feeds will challenge existing social media business models [81].

6.1.2 Supporting identity evolution across life transitions. During the decade our study was conducted, many of our participants have undergone major life transitions, possibly affecting their use of social media. As participants navigate different life phases, their evolving use of social media platforms highlights the critical role these platforms can play in supporting life and identity transitions. Drawing from Haimson’s conceptualization of social media as a “social transition machinery” [30], we see how platforms can facilitate identity exploration and reconstruction during major life transitions. Haimson’s work emphasizes the importance of designing platforms that enable users to embody and manage multiple identities across different social contexts. Similarly, Zhang et al. [82] highlight the challenges and opportunities of using separate online networks for identity work during life transitions, underscoring the need for spaces that offer both flexibility and privacy. While much of the discussion around platform design focuses on improving large mainstream platforms, our findings suggest that smaller, private, or alternative platforms may better support users during these transitions. Such platforms often provide the intimacy, community focus, and user control that align with the needs of individuals navigating identity shifts or seeking selective interactions. Designing for life transitions could involve creating tools that support multi-faceted identity representation, flexible audience customization, and seamless interoperability across platforms.

6.1.3 Ethical implications of problematic algorithmic design. Our findings also raise important ethical questions regarding the algorithms that drive user engagement. The growing perception of social media use as something that must be regulated reflects concerns about platforms exploiting psychological triggers to maximize engagement. HCI researchers must consider the long-term effects of problematic algorithmic design on users’ mental health. Offering greater transparency and user control over how algorithms curate content could help mitigate these negative effects. This is especially important since research has shown that lack of understanding algorithms and the ways in which they operate can lead to algorithmic conspiratoriality [15]. For instance, Ruiz et al. propose the introduction of design frictions on social media to reduce mindless scrolling while maintaining user satisfaction [68].

6.1.4 Implications for well-being and mental health interventions. The recognition of the time-consuming nature of social media made by the participants in our study suggests a need for interventions that promote healthier habits. This finding is in line with the growing focus in HCI to explore and design digital well-being initiatives that encourage mindful use, combined with resources for users

who struggle with overuse [16]. Understanding the trajectory illustrating the shift from enjoyment to management from a user perspective could support HCI researchers in developing tools that help users balance their lives with their digital devices and activities. As Aalbers et al. [1] suggest, momentary procrastination and increased smartphone use may also play a role in this shift from active to passive behavior, as users grapple with distractions and more private interactions [1].

6.2 Methodological reflections

As we noted in the introduction to this paper, studying social media involves studying a moving target [33, 55]. We suggest that future research in HCI should continue to explore longitudinal changes to better understand how to design social media that adapts to users’ evolving needs and supports sustainable use patterns as life circumstances and practices shift. The longitudinal approach of this study provides valuable insights into how user experiences and attitudes towards social media change over time. Our findings highlight the importance of considering temporal aspects in social media studies, as the impacts of these platforms are not static but evolve with users’ changing life circumstances and growing awareness of platform dynamics [33, 55]. While cross-sectional studies still dominate research on social media use, longitudinal studies are gaining traction, particularly in examining the relationship between social media use, life satisfaction, and mental well-being, and how these evolve over time (e.g. [56, 57, 62, 74]). Longitudinal surveys can track changes in social media use and attitudes across larger, more diverse populations. By administering surveys to the same group of participants at different points in time, researchers can identify trends and patterns in social media behavior. Surveys can include questions about attitudes, motivations and perceived effects on well-being. Combining this self-reported quantitative survey data with qualitative interviews can offer a more comprehensive view of changes over time [60] and allows for both tracking of changes as well as in-depth understanding through participant narratives. Building on the approach used in this study, repeated qualitative interviews can provide deep insights into how users’ perceptions and behaviors change over time. By interviewing the same participants at regular intervals, researchers can trace the evolution of attitudes, practices, and concerns related to social media use. We have found that stimulated recall interviews, where participants are shown past interview clips or social media content, were particularly effective in prompting reflection and highlighting changes in behavior or perspective. While our approach spans over several years, even shorter time periods would be relevant to capture change. As noted by Kjærup et al. [46], longitudinal studies in HCI research can vary greatly in duration, and even shorter-term studies can provide valuable insights into evolving user behaviors and experiences over time. In our work, we did not collect data between the specific data collection points in 2012, 2017, and 2022. However, interim data collection could have been beneficial. For instance, inviting participants to document their social media use and experiences in some kind of social media reflection diary, would allow researchers to trace changes in usage patterns, emotional responses, and the perceived impact of social media on daily activities. Diaries could

then be supplemented with follow-up interviews to explore topics in greater depth [58].

6.3 Limitations and future work

While we have provided some considerations for design, we hesitate to provide more detailed design implications. Dourish argues that while some HCI studies lead to direct design implications, others do not need to and emphasizes that the value of such studies instead often lies in deepening the understanding of users' practices and contexts rather than directly guiding the design process [22]. Similarly, Chalfen [11] emphasizes the importance of understanding the "how" rather than the "why" when studying technology-mediated social practices to uncover social and cultural significance of everyday practices. This perspective aligns with discussions in HCI, such as Dourish's argument, and is echoed in work like that by Bowman et al. [6] and Kjærup et al. [46], demonstrating that research focusing on understanding user experiences and practices, rather than generating specific design proposals, has a valued place within the CHI community.

As with all research, our study comes with challenges and limitations. Limitations related to validity, generalizability, and transferability are well-recognized concerns in qualitative HCI research [5]. Our study aimed to ensure quality by prioritizing transparency and taking a reflexive approach while iterating between empirical details and the broader context throughout data collection and analysis. While certain challenges are identifiable and manageable, others remain more difficult to address. For instance, as with any study relying on users describing their technology use, we cannot ensure that the informants' descriptions capture their actual use, experiences, and opinions. Neither can we exclude the possibility that some of the changes in social media use depend on the fact that our informants have simply aged. Also, the informants consisted of a relatively homogeneous group in terms of geographical residence, ethnicity and socio-economic backgrounds, which could be seen as a limitation of this study. Consequently, the findings should not be considered fully transferable to other user groups. At the time of recruitment of participants in 2012, when social media use was less widespread and Instagram was relatively new, our primary focus was to include active users nearby for purposes of data collection, which limited the diversity. If conducting this study today, a broader inclusion would be both possible and advisable. While our study provides detailed and rich descriptions of social media use, analyzing the content that users post and engage with on social media platforms can provide greater insights into longitudinal changes. An extended approach for future work could be to analyze user content across time on a larger scale to match with findings from our qualitative data, since analyzing large datasets over time can reveal broader trends in user behavior [52]. By tracking changes across time in the type of content shared, the frequency of posts, and interactions with other users, researchers would be able to identify additional shifts in engagement. This could include content analysis of text, images, and videos shared on social media, as well as examining digital footprint metadata such as timestamps, hashtags, and geotags. While methodologically and ethically challenging, such an approach would provide objective data on how social media use changes and could be combined with

self-reported data to explore discrepancies between perceived and actual behavior [72]. Finally, we hope that our longitudinal design can be relevant not only to understand social media use, but also as a piece of discussion for HCI to spark interest in employing longitudinal research designs to understand the impact of technology on individuals and society more broadly.

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