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In Their Own Words: How Adolescents Use Social Media and How It Affects Them

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Abstract

The aim of this qualitative study was to uncover homogeneity (commonalities between adolescents), heterogeneity (differences between adolescents), and duality (differences within adolescents) in the relationship between adolescents' social media use and well-being. To do so, 8 focus groups with 55 adolescents aged 14–17 were conducted. Anchored in the differential susceptibility to media effects model, we examined adolescents' (1) individual motives and (2) moods leading to social media use, (3) the nature of this use, (4) their affective responses, and (5) perceived longer-term effects. Through deductive thematic analysis, we noted large homogeneity in motives for social media use but heterogeneity in moods leading to social media use. In addition, our findings revealed heterogeneity and duality in the affective responses and the perceived long-term effects of social media use. This duality, where the same individual is affected in both positive and negative ways by social media use, appeared in various forms: *concurrently*, when adolescents experience conflicting feelings simultaneously, such as feeling both envy and inspiration; *alternately*, when adolescents shift between experiences, such as feelings of connection and isolation; and *sequentially*, for example, where initial enjoyment gradually turns into boredom. Furthermore, duality appeared across different cognitive and affective aspects of well-being. Directions for future research are provided on how to examine the role and meaning of various forms of homogeneity, heterogeneity, and duality in the relationship between adolescents' social media use and well-being.

Keywords

focus groups, adolescents, social media experiences, individual differences, mood management, well-being, differential susceptibility to media effects model, TikTok, Instagram, Snapchat

Over the last decade, there has been a burgeoning interest in dissecting the relationship between adolescents' social media use and their well-being (Valkenburg, Meier, & Beyens, 2022). This surge of interest is attributed to social media's increasingly pervasive presence in the lives of young people, raising concerns among parents, educators, and policymakers about its potential impact on their well-being. Most of the research in this area is quantitative, cross-sectional, and based on aggregated results. Results vary widely, with different studies showing a range of small positive, negative, or no associations with well-being (Odgers & Jensen, 2020; Orben, 2020; Parry et al., 2022). This diverse array of findings underscores the necessity for more nuanced research approaches that go beyond aggregated results. Such more nuanced approaches, known as idiographic or person-specific approaches, focus on the unique, individual experiences of adolescents (Marciano et al., 2022; Valkenburg, Beyens, et al., 2022).

Two distinct research streams within these idiographic approaches have begun to make significant contributions to our understanding of adolescent social media use and well-being. The first research stream employs experience sampling methods (ESM), which entails tracking adolescents over several weeks to collect multiple assessments of social media use and well-being within each adolescent (Valkenburg, Beyens, et al., 2022). These studies typically uncover considerable *heterogeneity* in the effects of social media on well-being. For instance, Beyens et al. (2020) reported that while 44% of adolescents experienced no change in well-being following social media use, 46% felt better, and 10% felt worse. Intriguingly, one study also revealed *duality* in effects, where adolescents simultaneously reported both positive (inspiration) and negative

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experiences (envy) while using social media, which may, in turn, impact their well-being in opposite ways (Valkenburg, Beyens, et al., 2022).

While ESM studies have provided valuable insights into the relationship between social media use and well-being, their scope is somewhat limited by a reliance on narrow quantitative measures. The inherent repetitiveness of ESM, requiring participants to complete similar questionnaires over extended periods, often results in the use of brief and constrained measures. This leads to limitations in two key areas. First, ESM studies typically operationalize social media use in terms of time spent on social media, while indicators of why and how adolescents use social media might be more informative to understand effects on well-being (Meier & Reinecke, 2021; Siongers & Spruyt, 2023). Second, ESM studies often focus on specific well-being indicators, such as one-item measures of happiness. While these indicators are undoubtedly important, scholars have argued that the multifaceted nature of well-being may not be entirely captured by such unidimensional metrics, calling for a broader approach to measuring well-being (Dodge et al., 2012).

A second research stream within the idiographic approach encompasses qualitative studies that employ focus groups or interviews. These methods provide a valuable counterbalance to the limitations inherent in ESM studies by allowing adolescents to articulate the diverse ways they use social media and how they experience the effects of social media use on their broader sense of well-being (Keles et al., 2023; Shankleman et al., 2021). Despite their importance, such qualitative studies are still relatively scarce, representing only a small fraction of the total research in this area (Schønning et al., 2020). The qualitative studies that have been conducted cover a wide variety of social media experiences and effects on adolescent well-being, underscoring the importance of an individual differences approach (Keles et al., 2023; O'Reilly, 2020; Winstone et al., 2021). Moreover, in line with the ESM findings by Valkenburg, Beyens, et al. (2022) qualitative work has also identified instances of duality in adolescents' social media experiences (Weinstein, 2018). For instance, within the same individual, interactions on social media may foster both closeness and disconnection.

The Current Study

While the existing qualitative studies into social media use and well-being offered substantial insights, they left critical gaps that require further exploration. First, while qualitative studies have excelled in capturing the full spectrum of diversity, it is equally important to identify potential homogeneity (i.e., particular patterns being common to most adolescents) alongside the observable heterogeneity. Second, previous qualitative research primarily delved into the diversity of adolescents' social media-related experiences. However, several scholars have pointed out that these experiences do not occur in a vacuum, underscoring the need for an in-depth investigation into how this diversity may be reflected in other parts of the media effects process (Siongers & Spruyt, 2023; Winstone et al., 2021). To address these two gaps, our study employs focus groups with adolescents in which we assess homogeneity and heterogeneity across the media effects process as conceptualized in the differential susceptibility to media effects model (DSMM; Valkenburg & Peter, 2013), namely: (1) antecedents (i.e., motives and moods) that lead adolescents to social media use, (2) their social media use (e.g., activities), (3) their affective responses to social media use, and (4) perceived longer-term consequences of social media use.

An additional important aim of our study is to disentangle the notion of duality in social media use. Previous studies have often highlighted the "duality of social media" with titles like "The beauty and the beast of social media" (Keles et al., 2023) and "The good, the bad, and the ugly" (O'Reilly, 2020). However, these studies actually describe heterogeneity, meaning that the use of social media results in different outcomes among different individuals. To our knowledge, Weinstein (2018) is the first to report duality within an individual's affective responses to social media. Weinstein's observation falls under what we would label "*within-person duality*." In this study, we build on Weinstein's study. We define within-person duality broadly as "the coexistence of both positive and negative effects of social media use on an individual." We believe within-person duality is not limited to immediate affective experiences but may also occur in longer-term consequences of social media use. Our study, therefore, also examines whether adolescents exhibit within-person duality in both their affective responses and longer-term impacts of social media use (Valkenburg & Peter, 2013).

The ultimate aim of our study is to enhance our understanding of the intricate relationship between social media use and adolescent well-being. In previous studies, both adolescents' affective responses to and longer-term effects of social media use (parts 3 and 4 of the DSMM) have been linked to well-being. Well-being is a complex, multifaceted construct that has been defined in numerous ways (Meier & Reinecke, 2021; Valkenburg, 2022). This complexity challenges researchers and can be even more daunting for adolescents, who are still developing cognitively and emotionally. To avoid any ambiguity or limitation that might arise from adolescents' interpretations of the term "well-being," and to ensure that we do not restrict their responses by imposing our definition of the term, we have chosen to ask them directly about the positive and negative influences they have experienced from social media and not use the term "well-being" in our focus groups (cf. Mack et al., 2009). In our view, this method allows for a more authentic and comprehensive exploration of adolescents' immediate and longer-term experiences with social media.

Method

Study Design

This study employed focus groups as a data collection method because focus groups can generate rich and varied data that are difficult to obtain from individual interviews with adolescents (Peterson-Sweeney, 2005). In individual interviews, adolescents may be rather self-conscious, feel pressured to answer in a certain way, or may be too nervous or reluctant to talk about their true feelings (Peterson-Sweeney, 2005). Involving peers in focus groups can increase comfort and help create a relaxed atmosphere for those who may be hesitant to speak up, especially when exploring sensitive topics such as body image and depressive feelings (Daley, 2013; Peterson-Sweeney, 2005), as we do in the current study. Finally, given that social media are inherently interactive, it is expected that the interactive nature of focus groups will encourage the sharing of both individual and collective experiences (Daley, 2013).

To ensure the study's methodological rigor, we employed the Four Dimensions Criteria—credibility, dependability, confirmability, and transferability—as introduced by Lincoln and Guba (1985). Following recommendations by Nowell et al. (2017), several measures were implemented to meet these criteria, detailed in the procedure below. Furthermore, in adherence to best practices in qualitative research, we followed the consolidated criteria for reporting qualitative research by Tong et al. (2007).

Participant Selection and Recruitment

This study was ethically approved by the University of Amsterdam (2022-YME-14647). Research company *CHOICE Insights* recruited participants, securing informed assent from them and consent from their parents. The participant selection was stratified by age, gender, educational level, and region of residence, aiming for a sample that is moderately representative of the target group. Each adolescent was encouraged to bring a friend, enhancing comfort and interaction in the focus groups (cf. Daley, 2013). A total of 55 adolescents (52.7% girls) aged between 14 and 17 participated, divided into 8 focus groups. The group assignment followed guidelines for gender, age, educational level, and geographical proximity (Daley, 2013; Peterson-Sweeney, 2005; Yau & Reich, 2019).

Our focus group design meant that four focus groups were held in an urban area (Amsterdam) and four in a rural area in the South of the Netherlands (Den Bosch). The four focus groups in each region consisted of two groups of 14- and 15-year-olds (boys and girls separately) and two groups of 16- and 17-year-olds (boys and girls separately). In Amsterdam, the boys were enrolled in lower general secondary education and the girls in higher general secondary education, and in Den Bosch, it was the other way around. All participants were born in the Netherlands, were mostly White, with some having parents born abroad. The focus groups occurred in April and May 2022, and participants received a monetary compensation of 40 euros.

Data Collection Procedure

Research company *CHOICE Insights* organized and moderated the sessions. All focus groups lasted 90 minutes, were held in person, and took place in a cozy room. Participants were seated around a table and received drinks and snacks. In addition to the professional female moderator, a professional notetaker was present. The authors were able to observe the focus groups live through a one-way mirror window. After introducing the study's purpose, informing participants about the window, and ensuring confidentiality, the moderator sought consent for recording.

The moderator used a semi-structured interview guide, beginning with ice-breaker questions (cf. Peterson-Sweeney, 2005), followed by questions developed by the authors of this study. The guide was structured to address the various phases of the media effects process, as outlined in the DSMM; Valkenburg & Peter, 2013). As such, the guide included questions about (1) antecedents (i.e., motives and moods) that lead adolescents to social media use, (2) their social media use (e.g., activities), (3) their affective responses to social media use, and (4) perceived longer-term consequences of social media use. The guide was structured to allow for flexibility, incorporating a mix of open-ended inquiries and additional probing questions, aimed at encouraging participants to share their personal experiences (Mack et al., 2009). Moreover, the moderator was granted the freedom to explore additional relevant topics connected to social media as they emerged during the discussion. The full interview guide can be found as a Supplement.

The authors made notes while watching the focus groups from behind the one-way mirror. Through observation of the focus group interviews, the researchers verified that theoretical saturation of the data was reached after eight focus groups, meaning that the same themes started to recur, and more data would not add meaning to the emergent patterns of homogeneity, heterogeneity, and duality in adolescents' social media use and well-being (Braun & Clarke, 2006).

Data Analysis

The recordings were transformed into anonymous verbatim transcriptions by the notetaker, resulting in 170 pages of text. We used thematic analysis to investigate the nuanced interplay of homogeneity, heterogeneity, and duality in adolescents' social media use and its impact on well-being. Thematic analysis is particularly suited for examining the perspectives of different participants, highlighting similarities and differences between participants (Braun & Clarke,

2006; King, 2004), which aligns perfectly with the objectives of this study. Specifically, we used *deductive* thematic analysis, a technique involving predefined theoretical themes (Braun & Clarke, 2006), as this study is guided by the DSMM (Valkenburg & Peter, 2013). To that end, our analysis aimed to discern patterns in adolescents' (1) motives and (2) moods influencing social media use, (3) usage patterns, (4) affective responses, and (5) perceived long-term effects of their social media use.

The thematic analysis consisted of several phases. To begin the analysis, consistent with the steps recommended by Braun and Clarke (2006), the first and second authors immersed themselves in the data by reading each transcript and corresponding notes multiple times. This was crucial for developing a comprehensive understanding of the data and for the initial identification of potential patterns and themes (King, 2004). Next, relevant themes were sought at the semantic level, such as specific statements or accounts (e.g., an adolescent discussing their following of a particular news account). Guided by the DSMM, we then crafted broad, overarching codes (like categorizing the pursuit of information as a social media use motive) to methodically structure the data into themes that align with the DSMM's various stages. Throughout this process, the research team engaged in continuous reflective practices and held regular meetings to critically assess the data.

In the final phase of our analysis, each theme was meticulously reviewed and written up, facilitated by peer debriefing sessions as advised by Lincoln and Guba (1985) and Nowell et al. (2017). During the analytical process, we tried to ensure that our interpretations remained as unbiased as possible. This thorough discussion and scrutiny were crucial for ensuring the credibility of our findings and for accurately identifying and relating patterns within each stage of the DSMM. After a comprehensive review of all data, coding, and reflective diaries, we crafted the "Results" section. This section, enriched with direct quotes and data extracts in line with recommendations by Braun and Clarke (2006) and King (2004), offers a detailed, validated narrative of our findings.

Results

Motives for Using Social Media

Interestingly, adolescents' motives for social media use were rather homogeneous. Adolescents named four main motives for turning to social media. First, social media satisfies adolescents' *need for connection*, as it enables them to keep in touch with friends, family, and friends of friends. Second, they go on social media to serve their *need for entertainment*, for example, on TikTok or YouTube to watch entertaining and funny content. Third, they use particular social media when in *need of inspiration* (e.g., to check out cooking videos to learn new recipes or dancing videos to learn choreographies). And finally, they go on social media because of their *need for information*. They are interested in updates about a variety of things, ranging from sports to world news. As one girl (15) put it,

> I find it important that I know what is happening in the world. I often know things before my parents do. They watch the news on television, but by then, I have already seen it online. They say: "you never read a newspaper." But I see it all on Insta.

These four motives are in line with findings from previous studies (e.g., Romero Saletti et al., 2022; Throuvala et al., 2019).

We observed some heterogeneity in adolescents' motives for using social media to form versus maintain friendships. For example, one boy (15) said,

> Social media enable you to become friends with people you didn't know before. You will add someone and get to know that person. That could be a friend of a friend or a total stranger. It's a way to get to know someone that you usually don't get into contact with.

Then another boy (15) responded: "Yeah, but it's not like you really make new friends that way," upon which a third boy (15) replied: "I do actually." Furthermore, a few adolescents brought up additional motivations for social media use. For example, a girl (14) explained that she would go on social media to reminisce about momentous occasions by retrieving pictures of these occasions (similar to Romero Saletti et al.'s *documentation*). Other adolescents expressed a *need to be seen* (cf. Romero Saletti et al., 2022). In addition, for a few adolescents, *self-expression* was a motivation for social media use. As a boy (17) said: "I always post the results of my football game because playing football is a super important part of me."

Social Media-Related Mood Management

We also asked adolescents how they use social media when they are (not) feeling well. Some homogeneity emerged in their responses, with nearly all participants indicating they turn to social media when bored. However, beyond boredom, there was considerable heterogeneity in the ways a negative mood influences their social media use. There were some adolescents who indicated *avoiding* social media when they were not feeling well but they varied in what they would do instead. For example, a girl (14) said: "When I am feeling sad, I normally just go over to a friend," whereas a boy (16) said: "If I am unhappy, I won't go on social media, I rather play FIFA, gaming is an escape from reality." Yet another girl (14) said: "I usually put on my headphones and go listen to music. I don't want to talk to people, I'll do that again when I am feeling better."

Other adolescents indicated spending *more* rather than less time on social media when they are feeling bad. One girl (14) said: "When I am sad, I'll spend more time on social

media because I don't feel like doing anything else." Yet, again, among this group, there was a large variation in the type of social media activities they engage in. There were adolescents who indicated going on social media to connect with their close friends when feeling bad, as another girl (14) explained: "I send a direct message to one or two close friends to get it off my chest." Others indicated going on social media for entertainment when feeling bad. This could take various forms, ranging from checking updates from celebrities and influencers to watching videos on various platforms. There were also adolescents who indicated engaging in a combination of activities. For example, one boy (16) explained: "If I have a bad day, I'll go on Snapchat to see if I have any new messages, and then I'll go on Netflix or something to clear my head and not think about reality."

We also asked adolescents what they do when they are in a particularly good mood. A few mentioned they would engage in similar activities as they would in a bad mood. However, interestingly, a notable pattern of homogeneity emerged, as many adolescents reported using social media *less* than usual and having a greater preference for face-to-face interactions. A 14-year-old girl exemplified this trend by saying: "When I feel happy, I'll go and do something fun. I probably text someone like, hey, do you want to hang out?!" Consequently, they often meet up with friends for various activities, such as shopping, playing football, or enjoying a drink together.

Social Media Use

We asked adolescents which social media platforms they use. On the one hand, there was large homogeneity in adolescents' social media use, as nearly all adolescents in our focus groups listed Instagram (98.2%), Snapchat (96.4%), and TikTok (92.7%) as platforms that they used. On the other hand, apart from the ubiquitous use of these platforms, there was large variation in adolescents' use of additional platforms. In total, adolescents listed 30 different social media platforms, of which the majority was only being used by a few. There was large heterogeneity in how adolescents perceive particular social media platforms. For example, in discussing social media platform Omegle ("which is basically Facetiming with strangers"), one girl (14) said to like it because: "Sometimes you have an amazing conversation with someone you don't know." Other (14- and 15-year-old) girls primarily mentioned negative experiences with Omegle (e.g., seeing "dickpics," sexual assault, and weapons). Several (16- and 17-year-old) boys described an opposite experience: "Omegle? Yes, that's for goofing around, to have a laugh." "You can't take that seriously." Yet another group of (14- and 15-year-old) boys stated: "Yeah, we know Omegle, but that's really outdated."

Platform Activities. We noticed large homogeneity in how adolescents use particular platforms. For example, Snapchat seems to be rather ubiquitously used to communicate with friends. But message exchange also occurs across platforms. For example, if their friends do not respond quickly enough via Snapchat, adolescents send the message via Instagram DM or WhatsApp. Similarly, content from one platform (e.g., TikTok) may be exchanged with friends via another (e.g., Snapchat or Instagram). For browsing entertaining content, TikTok is adolescents' go to platform and, to some extent, Instagram as well, although adolescents consider Instagram to be "more formal" than TikTok. Posting their own content on these platforms is not something they do regularly. If they do so, adolescents are very critical about what they post: "If I post something, it is usually just a nice picture, because I know everyone can see it." WhatsApp is primarily used for "functional communication" with parents, classmates, sports teams, employers, and/or colleagues. We also noted that the function of platforms changes over time. For instance, while WhatsApp previously served as the primary platform for social interaction, this role appears to have shifted to Snapchat in recent times (Fernández-Ardèvol et al., 2022).

We also found heterogeneity in how adolescents use social media. For example, only a small minority of our sample created and uploaded videos themselves. In addition, a few of the girls engaged in activities on Pinterest, such as searching for ideas for recipes, clothing, or decorating their room. Furthermore, some of the boys used Discord to communicate with other gamers while playing and to get in touch with a community of like-minded people. In addition, a few 17 year old boys mentioned that they like to go on Telegram, where users are able to stay anonymous: "On Telegram, you can do whatever you want, and you see . . . uhm . . . yeah . . ." In contrast, other adolescents told us that they actively avoid platforms such as Telegram because they are worried about the consequences of this anonymity.

Affective Responses to Social Media Use

There was substantial homogeneity in adolescents' opinions that social media use results in enjoyment. However, we detected large heterogeneity in their description of other affective responses. For example, some adolescents (mostly boys) indicated that they were not affected much by offensive or shocking content. For instance, some adolescents discussed shocking footage of the war in Ukraine (e.g., footage of dead bodies in the streets): "It is sad of course, but you need to go on with your life." In contrast, several other adolescents were rather disturbed by seeing footage of shocking events. Some girls expressed to be quite shocked when they had received a "dickpic" via social media. Yet, even though some adolescents would rather not see this type of content, they also indicated that it is often inescapable: "My friend suddenly showed a decapitation video to me on his phone."

In addition, some girls expressed that the continuous stream of "perfect pictures" on social media leaves them

feeling insecure and jealous. Some try to counter those feelings by, for example, following accounts that revolve around body positivity, such as Feminist, an activist Instagram account that promotes body positivity. Another girl (15) even decided to only follow accounts "from people who look like me" so that she would keep feeling good about herself. Several boys reported being either unaffected by seeing images of "shredded" guys or feeling inspired to eat healthier and exercise more, rather than experiencing envy or jealousy. As one boy (17) put it: "If you see someone that is shredded, like very muscular, then you want that too and you think to yourself, I should go the gym instead of lying on the couch."

In addition, we noticed heterogeneity in adolescents' social media use, leading to feelings of connectivity and loneliness. On the one hand, various adolescents gave examples of social media use leading to social connectivity. For example, adolescents often use social media in the company of their friends, showing each other funny pictures and videos. Furthermore, social media use enables adolescents to stay in touch with people who live further away or whom they would otherwise not approach so easily. As one girl (16) said: "Usually I find it difficult to make contact with others, but not on social media." In addition, many adolescents expressed to feel connected to their friends by being in touch with them throughout the day. So, rather than replacing face-to-face contact (called "social displacement"), in line with a recent review by Hall and Liu (2022), it seems that social media adds a level of connectivity to many adolescents' lives.

However, several adolescents also expressed feeling lonely or left out due to social media use. As one girl (17) explained,

> Last weekend, I was sick, so I had to stay home while many of my friends went out to party. Seeing them have fun on social media did not feel good, it made me feel like I was missing out.

Even more, some adolescents told us that they discovered via Snapmap, the location sharing functionality of Snapchat, that their friends were hanging out without them, causing them to feel left out, sad, and often jealous. As one boy (15) said: "Snapmap makes me feel jealous because I see people together who shouldn't be together." Similarly, one girl (14) explained: "If you ask your girlfriends whether they can hang out and they say no and you then see on Snap that they are hanging out with other people, that makes you feel bad."

Finally, in line with the findings by Weinstein (2018), we observed that there were *dualities* in social media experiences within some adolescents. For example, one girl (17) said: "When I see pictures from people who are traveling the world, I guess I feel both jealous and inspired." In addition, two other girls acknowledged that while social media made them feel more connected with certain individuals, they simultaneously experienced negative feelings from online comments made by others. Furthermore, some adolescents indicated that even though social media use may initially lead to enjoyment, they regularly spend so much time on social media that it can eventually result in feelings of boredom. Echoing a similar sentiment, one boy (17) explained: "I have a lot of fun on social media, but when it makes me go to bed too late again, I feel bad about it the next day."

Perceived Longer-Term Influences of Social Media Use

Adolescents mentioned a variety of positive lasting influences of social media use, which were recurring topics in most focus groups. First and foremost, they argued that social media had helped them in their personal development. For example, several adolescents mentioned that social media enabled them to develop their sense of humor, clothing style, and taste in music. As one girl (14) said: "I have seen many funny videos, and now I know what is funny and what isn't. My sense of humor has developed through the videos I have seen." Similarly, one boy (16) said: "It also changes your personality, because you become more mature by the things you see." Finally, one girl (14) summarized it as follows: "Social media helped me discover who I am, what I like and dislike, that way I learn about myself."

Other adolescents mentioned that social media use had broadened their horizon and helped them establish informed opinions. As another girl (15) explained: "My parents have a particular opinion, but through social media I know that much more is possible for me." Similarly, another girl (16) said,

> Social media have had a great impact on my personal opinions as I discovered that there are many racist and sexist people out there. You get to see how it is outside of the Netherlands, and what the status quo is over there. It changed me in a positive way because now I am more open-minded and down to earth.

There were also adolescents on whom social media use had a negative impact. Several adolescents indicated that due to the use of social media, their school performance suffers, as does their sleep. As one boy (17) put it: "If you go to sleep at 2AM every time, at some point you are done with yourself." When asked if they ever try to stop watching, one girl (16) replied: "I always try, but I fail every time. It is too addictive." In addition, several adolescents mentioned the lasting negative impact of cyberbullying. Moreover, several girls admitted that seeing all those picture-perfect images of models and influencers on social media had made them more insecure in the long run. One girl (16) explained: "Social media use over the past couple of years has brought down my self-esteem. You see those perfect-looking models all the time and you are so young yourself and don't know how it all works yet." Another girl (14) even confessed to us: "It has been a really difficult period for me because of this. I have been seeing a psychologist for quite some time now."

Upon asking whether social media may have had a positive and/or negative influence on them, some adolescents couldn't pinpoint any specific effects, some only mentioned positive influences, and some only negative ones. Yet, there were also adolescents who showed duality in their responses. Several girls mentioned that they had become more insecure due to social media or were traumatized long-term by shocking content. For example, one girl (14) said: "Those videos of sexual assault and abductions have made me scared to cycle in the dark by myself. The idea that someone can just grab you. That's scary. It's usually a young girl that is taken." At the same time, these same girls also reported a lasting positive influence on their friendships and social skills. This duality is further illustrated by the same 14-year-old girl who talked about how social media contributed positively to her sense of humor development, yet also acknowledged, "I have seen many images that I really didn't want to see and those stick with you."

Discussion

The goal of our study was to enhance our understanding of the commonalities and differences between adolescents in (a) the motives and moods that lead to social media use, (b) their social media use, (c) their affective responses to social media use, and (d) the longer-term consequences of social media use in terms of well-being. Previous qualitative work has predominantly focused on the heterogeneity of adolescents' experiences with social media. Our study extended this earlier work in that it also identified homogeneity and within-person duality within immediate and longer-term consequences of social media use. Our findings may help clarify when generalizations about adolescents' social media use and well-being are appropriate and when individual differences need to be considered. Next, we discuss our key findings, their implications, and directions for future research.

Motives and Moods in Relation to Social Media Use

Our focus group discussions unveiled considerable homogeneity in the motives behind adolescents' social media use, with adolescents predominantly turning to social media for connection, entertainment, inspiration, and information. However, when considering social media's role in adolescents' mood management, the picture appears more complex. Here, we observed a marked heterogeneity among participants. This heterogeneity may shed light on the small effect sizes often reported in prior research (e.g., Johnson & Knobloch-Westerwick, 2014) and help reconcile conflicting findings in these earlier studies. For instance, Johnson and Knobloch-Westerwick (2014, 2017) showcased contradictory results in mood-driven social media behavior across two different samples. Such discrepancies may be explained by the significant heterogeneity in how individuals' moods guide their social media activities. It also prompts the question of whether there is a within-person duality in mood-driven social media use, meaning that social media use might occasionally uplift mood yet, in other instances, intensify negative feelings. Although our study does not provide explicit evidence for duality in mood-driven social media, it is an intriguing possibility that warrants further exploration.

Social Media Use

Our findings regarding adolescents' social media use have important implications for the design of quantitative studies on adolescents' social media use and well-being. Most previous quantitative studies have examined indicators of well-being in relation to time spent on a single social media platform (Frey & Friemel, 2023). This can be a valid approach for studies that include outcomes like distraction or digital stress that may directly be affected by the amount of time spent on social media (Yang et al., 2021). However, as the current study showed, adolescents' social media use typically consists of two to three highly popular and universally used social media platforms, combined with several additional person-specific platforms. As such, for those studies in which measuring time spent is warranted, a focus on single platforms does not do justice to adolescents' social media use.

To measure social media use more accurately than time spent on a single platform, Bayer et al. (2020) and Frey and Friemel (2023) suggest conceptualizing it in terms of users "personalized ecologies" or "repertoires," capturing the full extent of usage. Ideally, this would involve using tracking tools for objective measurement of all social media app usage (Parry et al., 2022), though this is currently limited to Android phones and can be constrained by budget and design limitations. An alternative, more feasible approach is to tailor self-report studies to individual social media use. This could involve asking adolescents to identify the three to five platforms they use most frequently and customizing follow-up survey questions accordingly. Another option is to present a list of platforms and present them with follow-up questions for each of the selected platforms. Given the diversity and rapid changes in adolescents' use of platforms, as evidenced by the 30 different platforms they listed in our study, pretesting such a list with a representative sample is advisable.

For most quantitative studies on adolescents' social media use and well-being, other aspects of social media use than time spent are likely to play an important role. Therefore, it is necessary to think about other ways to conceptualize social media use (Meier & Reinecke, 2021). Our findings indicate that a more informative approach might be to focus on the various activities adolescents engage in across different social media platforms. The prevailing active-passive dichotomy in social media use does not adequately capture this complexity (Valkenburg, Beyens, et al., 2022). Therefore, an activity-based, cross-platform framework is essential, like the ones

proposed by Weinstein (2018) and Yang et al. (2021). Both distinguish between activities that revolve around relational interactions (direct messaging), self-presentation/expression (posting and broadcasting), and browsing.

Affective Responses to Social Media Use

Transitioning to an activity-based cross-platform approach needs to go hand in hand with an individual difference approach toward adolescents' affective responses to social media. After all, this study showed that different adolescents have different or even opposite affective responses to the same social media activities. Accordingly, we advise future research to measure adolescents' subjective experiences associated with their social media activities. According to Grady et al. (2022, p. 525), "a media experience encompasses both media exposure and its attendant affective and cognitive processes, such as appraisal." Grady et al.'s definition deviates from traditional media effects theories in that their definition conflates the process of exposure with the individual responses that accompany this exposure (see Valkenburg & Peter, 2013). However, it seems more likely that one's *experience* of a social media message leads to individual changes in well-being than the objective content of this same message.

When measuring social media experiences, it is also crucial to acknowledge the duality in affective experiences that may accompany different social media activities. Currently, it is customary to measure opposing experiences as two ends on a continuum (e.g., ranging from feeling happy to feeling sad). However, as our results show, positive and negative media experiences are not each other's flip side and can both occur within the same social media user. A social media experience thus encompasses both users' social media activities and their accompanying *positive* and *negative* (affective and cognitive) responses to these activities. Consequently, future research should include separate items for both positive and negative social media experiences that may accompany different social media activities.

Linking Perceived Positive and Negative Influences of Social Media Use to Well-Being

In light of societal concerns about the impact of social media on adolescents' well-being, it is crucial to consider how the positive and negative influences of social media that adolescents identified in our focus groups relate to their well-being. Definitions of well-being vary, incorporating models such as Diener et al.'s (1999) "subjective well-being" and Ryff's "psychological well-being." Diener et al.'s (1999) model revolves around hedonic well-being, characterized by life satisfaction and the balance of positive over negative emotions. In contrast, Ryff (2013) focuses on eudaimonic well-being, which includes factors like autonomy, personal growth, and positive relationships, emphasizing a life of purpose and personal fulfillment. In addition, well-being and ill-being are distinct constructs, with the latter involving psychological distress like anxiety and depression, suggesting that social media's effects on these two constructs may diverge (Valkenburg, Meier, & Beyens, 2022).

Our study's findings on the positive and negative influences of social media use resonate with the varied outcomes documented in earlier studies (e.g., Keles et al., 2023; O'Reilly, 2020; Valkenburg, 2022). Some of the influences mentioned by adolescents are considered to be indicators of well-being (e.g., happiness) and ill-being (e.g., depression). Others are considered risk (e.g., loneliness) and resilience factors (e.g., self-esteem) for well-being (Valkenburg, Meier, & Beyens, 2022). Adolescents' varied responses signify the importance of a multifaceted approach to understanding well-being in the context of social media use. Even more, many responses from adolescents in the current study align with Ryff's (2013) concept of "psychological well-being," which encompasses elements like autonomy and personal growth. Such dimensions are often overlooked in quantitative ESM designs that typically focus on narrow measures of well- or ill-being. However, given that adolescents are in a crucial phase of personal growth, these elements of well-being are potentially vital and warrant careful consideration.

Furthermore, the presence of duality in adolescents' responses further supports the conclusion of previous research (Valkenburg, Meier, & Beyens, 2022) that well-being and ill-being are distinct constructs, meriting separate investigation. Duality appeared in various forms: *concurrently*, when adolescents experience conflicting feelings simultaneously, such as feeling both envy and inspiration; *alternately*, when adolescents shift between experiences such as feelings of connection and isolation in online interactions; and *sequentially*, for example, where initial enjoyment gradually turns into boredom. Furthermore, our findings highlight duality across different cognitive and affective aspects of well-being and ill-being. For instance, while social media may positively influence cognitive aspects like humor development, it can also negatively influence affective aspects of ill-being, such as lasting anxiety caused by exposure to harmful content.

The diversity in the nature of duality—spanning cognitive and affective dimensions and varying across different temporal and situational contexts—significantly deepens our understanding of the multifaceted ways adolescents are influenced by social media and its subsequent impact on their well-being. This diversity aligns with the concept of well-being as described by Dodge et al. (2012), who view it as a dynamic equilibrium that balances an individual's resources against challenges. Their "setpoint" theory suggests that well-being is not static but rather a fluid state, uniquely shaped by various individual factors. Consequently, recognizing and exploring these various forms of duality is crucial for future research, as it will help unravel how these

diverse experiences collectively influence adolescents' overall well- and ill-being.

Strengths and Limitations

Our qualitative approach was driven by the understanding that progress in grasping the complex relationship between adolescent social media use and well-being relies on direct, bottom-up consultation with young people (Lee et al., 2021). We opted for focus groups specifically for their ability to foster a sense of comfort and camaraderie among participants. This can lead to more candid and honest exchanges, as observed in our study, where adolescents engaged in open dialogues, comfortably responding to, and building on each other's insights, which enriched the discussions. To further facilitate these discussions, we employed a strategy inspired by Mack et al. (2009), tailored to accommodate adolescents' varying developmental stages. Recognizing that some participants may find broad, open-ended questions daunting, we started particular conversations with more concrete queries (cf. Mack et al., 2009). For example, we first asked adolescents whether they ever felt jealousy or inspiration because of social media before expanding the inquiry to include a broader spectrum of positive and negative influences of social media. This strategy, while effective in encouraging dialogue, means certain topics may have inadvertently received more focus. This nuanced balance highlights the ongoing need to refine research methodologies involving adolescents.

In addition to the challenges posed by engaging adolescents in meaningful conversations, other limitations are inherent to the focus group design. Despite their value in generating rich insights, focus groups can raise concerns about external validity due to their inherently small sample size. Furthermore, the group setting may sometimes suppress individual viewpoints, influenced by the dynamics of social desirability. To address these limitations, future research should conduct larger-scale individual interviews to verify the robustness of our observations and conclusions. Finally, qualitative research, reliant on the researchers' subjective interpretations, is prone to interpretative bias, as different researchers may draw diverse conclusions from the same data (Keles et al., 2023). Our study was underpinned by a conscious effort to minimize interpretive biases. Nonetheless, to improve the transferability and generalizability of our qualitative findings, it is crucial to expand the qualitative research body, aiming toward a comprehensive synthesis of individual difference perspectives.

Credit Author statement

Amber van der Wal: Conceptualization; analyzing focus group transcripts, writing paper; Patti M. Valkenburg: Conceptualization; analyzing focus group transcripts, writing paper; Irene I. van Driel: Conceptualization; analyzing focus group transcripts, commenting on draft versions of paper. All authors have agreed to the submission and the article is not currently being considered for publication by any other print or electronic journal.

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Ethical Approval

This study received ethical approval from the University of Amsterdam (2022-YME-14647). Research company *CHOICE Insights* recruited the participants and obtained informed assent from the participants and informed consent from their parents.

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Supplemental material

Supplemental material for this article is available online.

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