

Bell, Beth T. (2019) "You take fifty photos, delete forty nine and use one": A qualitative study of adolescent image-sharing practices on social media. *International Journal of Child-Computer Interaction*, 20. pp. 64-71.

Downloaded from: <https://ray.yorks.ac.uk/id/eprint/3817/>

The version presented here may differ from the published version or version of record. If you intend to cite from the work you are advised to consult the publisher's version:  
<https://www.sciencedirect.com/science/article/pii/S2212868918300424>

Research at York St John (RaY) is an institutional repository. It supports the principles of open access by making the research outputs of the University available in digital form. Copyright of the items stored in RaY reside with the authors and/or other copyright owners. Users may access full text items free of charge, and may download a copy for private study or non-commercial research. For further reuse terms, see licence terms governing individual outputs. [Institutional Repositories Policy Statement](#)

# RaY

Research at the University of York St John

For more information please contact RaY at  
[ray@yorks.ac.uk](mailto:ray@yorks.ac.uk)

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

**“You take fifty photos, delete forty nine and use one”: A Qualitative Study of Adolescent Image-Sharing Practices on Social Media**

Dr. Beth T. Bell, School of Psychological and Social Sciences, York St. John University, Lord Mayor’s Walk, York, YO31 7EX

E- [b.bell@yorks.j.ac.uk](mailto:b.bell@yorks.j.ac.uk), T- 01904 876119

Declaration of interest: None

**Key Words:** Social Media, Image Sharing, Digital Photography, Adolescence, Teenagers, Social Networking Sites

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22

**“You take fifty photos, delete forty nine and use one”: A Qualitative Study of Adolescent Image-Sharing Practices on Social Media**

**Key Words:** Social Media, Image Sharing, Digital Photography, Adolescence, Teenagers, Social Networking Sites

**Abstract**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14

There has been an exponential increase in the number of images created, shared and viewed across social media. Using exploratory qualitative methodology, the present research seeks to understand image-sharing on social media amongst adolescents; an important social media user group. Thirty five adolescents (*Age M* = 14.75; *SD* = 1.34; *Female N* = 21) from the UK, participated in semi-structured focus groups. Recordings from focus groups were transcribed verbatim and analysed using inductive thematic analysis. Three themes were derived from the data: (1) Presenting and Viewing Socially and Physically Attractive Selves, (2) Maintaining Offline Relationships, and (3) The Importance of Visible Quantifiable Feedback. These themes encapsulate the diversity and complexity of adolescent image-sharing practices, which must be considered within the context of adolescent identity and relational development, and peer-group/cultural norms. The implications of these findings are discussed within.

1 **“You take fifty photos, delete forty nine and use one”: A Qualitative Study of Adolescent**  
2 **Image-Sharing Practices on Social Media**

3 Social media refers to a group of web and mobile based applications used to  
4 communicate with others through user-generated content, including text, images and videos  
5 (Herring & Kapidzic, 2015). There are multiple different social media, typically distinguished  
6 by their emphasis on specific media types (text, video or images), temporality of content  
7 (ephemeral or persistent), level of anonymity afforded (identifiable or anonymous),  
8 communication synchronicity (synchronous or asynchronous), and nuanced functionality  
9 (such as the “like” of Facebook) (Bayer, Ellison, Schoenebeck & Falk, 2016; Herring &  
10 Kapidzic, 2015). Image-sharing has become an increasingly popular function of social media  
11 sites in recent years; the two most popular image-focused social media sites, Instagram and  
12 Snapchat, now respectively report 500 million (Instagram, 2019) and 181 million (Snap Inc.,  
13 2018) daily users. In 2015, it was reported that over 1.8 billion images were uploaded to  
14 social media every day (Meeker, 2015).

15 The growing popularity of image-sharing through social media is largely attributable  
16 to the increasing availability of mobile technologies with both sophisticated image-capturing  
17 capabilities and internet accessibility, such as smartphones and tablets, which are now owned  
18 by approximately 2.8 billion people globally (Statista, 2019). Creating, sharing, and  
19 responding to images through social media is now quick, convenient and inexpensive. Images  
20 created using mobile phones and social media applications have become ever more  
21 aesthetically complex and creative. Most social media (including Instagram and Snapchat)  
22 offer user-friendly facilities for editing digital images (Halpern & Humphreys, 2014). Most  
23 prominently, digital filters, which alter the shades and colours of the pixels comprising an  
24 image or add an image/text overlay, usually at the click of one button, are available within an  
25 increasing number of social media platforms (Halpern & Humphreys, 2014). Content

1 analyses of social media show how users share diverse visual content (Thelwall et al., 2015),  
 2 and new imaginative image-sharing practices, unique to social media, have been documented,  
 3 e.g. selfies and photobombing (Mascheroni, Vincent & Jimenez, 2015; Thelwall et al., 2015).

4         The present study uses exploratory qualitative focus groups to explore how and why  
 5 adolescents create, share and respond to images on social media. Understanding image-  
 6 sharing practices of adolescents is important: 85% of US adolescents and 70% of UK  
 7 adolescents report using social media (Anderson & Jiang, 2018; Ofcom, 2019). Furthermore,  
 8 social media purportedly plays a unique role in the lives of modern adolescents, serving as an  
 9 important socialisation tool facilitating personal and social development (boyd, 2014;  
 10 Michikyan & Suárez-Orozco, 2016). Image-sharing sites have become particularly popular  
 11 amongst this demographic; around two thirds of adolescents in the US and UK rate an image-  
 12 focused social media site, either Instagram or Snapchat, as their favourite (Anderson & Jiang,  
 13 2018; Ofcom, 2019). In the following literature review, existing theoretical and empirical  
 14 work examining adolescent social media use is reviewed, with a specific focus on findings  
 15 pertinent to image-sharing through social media where temporally persistent and identifiable  
 16 content is communicated asynchronously to a large audience (e.g. Facebook and Instagram).  
 17 To date, this research has focused on three key themes: self-presentation, social influences on  
 18 identity and peer relationships.

### 19 *Self-Presentation*

20         The combination of biological and social changes occurring during the adolescent years  
 21 lead adolescents to critically question who they are and how they fit into the world, as identity  
 22 concerns reach peak saliency (boyd, 2014; Erikson, 1968). The role of social media in identity  
 23 formation is typically understood in terms of self-presentation theory (SPT; Baumeister, 1982;  
 24 Goffman, 1959). According to SPT, individuals perform selective self-presentations for two

1 key motives; to depict themselves in a way that is congruent with their ideal-self and to please  
2 their audience (Baumeister, 1982). Understood within the lens of SPT, the creation and sharing  
3 of images through social media becomes a controlled act of self-presentation through which  
4 users can construct the self, and receive audience feedback (Chua & Chang, 2016; Mascheroni  
5 et al., 2015). Indeed, images have replaced text as the most popular medium of online self-  
6 presentation (Herring & Kapidzic, 2015; Zhao, Grasmuck, & Martin, 2008) and social media  
7 users describe depicting the self in indirect and subtle ways through images (Manago, Graham,  
8 Greenfield, & Salimkhan, 2008; Zhao et al., 2008). Self-presentational concerns may especially  
9 salient in social media where image content is temporally persistent and users are identifiable  
10 (e.g. Facebook and Instagram). Being acutely aware of the long term availability of images, as  
11 well as knowing that content is tied to offline identities, may lead to increased time and effort  
12 being invested in their creation (Bayer et al., 2016).

13         Individuals usually convey an idealized version of their offline self through social  
14 media images, which reflect authentic elements of their offline identity as well as a more  
15 socially desirable *possible* self (Manago et al., 2008; Zhao et al., 2008). Such socially desirable  
16 possible selves represent desirable, yet seemingly achievable, versions of offline identities. One  
17 of the more documented ways in which adolescents use images to show a socially desirable,  
18 yet possible, ideal self, is through the creation of self-images that aim to maximise physical  
19 attractiveness (e.g. boyd, 2014; Chua & Chang, 2016; Mascheroni et al., 2015). In qualitative  
20 research, adolescent girls from Singapore described using digital filters to enhance their  
21 appearance (Chua & Chang, 2016). However, the overuse of filters to the point where images  
22 were no longer seen as realistic, was condemned by the girls. Research also suggests that  
23 images can be used to convey social identities, by using visual markers to signify affiliation  
24 with specific social and cultural groups (Herring & Kapidzic, 2015; Manago et al., 2008). In

1 support of this, important gender and racial differences exist in the ways social media users  
2 present themselves in profile images (Kapidzic & Herring, 2014).

### 3 *Social Influences on Identity*

4 Identity construction is an inherently social process; identities are constructed through  
5 psychological understandings of interactions with others (Erikson, 1968; boyd, 2014). There  
6 are multiple idiosyncratic ways in which interaction is facilitated by social media; interaction  
7 can be private (e.g. Instagram and Twitter “direct messages”) or visible online to a more public  
8 audience in both quantitative (e.g. Facebook and Instagram “likes”) and qualitative (e.g.  
9 Facebook and Instagram “comments”) forms. Research has paid particular attention to public  
10 social interaction, especially “likes”, which are hypothesised to differ from offline interaction  
11 since they lack the need for subjective interpretation, and consequently constitute unambiguous  
12 and quantifiable positive reinforcement (Sherman, Payton, Hernandez, Greenfield, & Dapretto,  
13 2016). The importance of such interaction in reinforcing the image-sharing behaviour and the  
14 underlying attitudes of those who post them has been documented (Johnson & Van Der Heide,  
15 2015; Walther et al., 2011). It may play an important reinforcing role in identity development,  
16 affirming or discouraging identity choices (Mascheroni et al., 2015; Walther et al., 2011).

17 There are other ways in which social agents can influence adolescents’ identity  
18 development in social media environments. Drawing on social cognitive learning theory  
19 (Bandura, 2001), social media users, particularly peers, can serve as popular targets for  
20 imitation and vicarious learning if their visual displays in images are seen to be positively  
21 rewarded (Chua & Chang, 2016). Mainstream media models can also influence how  
22 adolescents present themselves in social media images; adolescent girls have described striving  
23 to recreate the appearance of idealised media models in their self-images posted to social media  
24 (Chua & Chang, 2016). Alternatively, social media users can also serve as targets for social

1 comparison (Chua & Chang, 2016; Fardouly & Vartanian, 2015). According to social  
 2 comparison theory, individuals are motivated to compare themselves to similar others (e.g.  
 3 peers) as part of ongoing self-evaluative practices (Festinger, 1954). Upward comparisons  
 4 involve targets perceived as superior and can lead to negative feelings about the self, whereas  
 5 downward comparisons involving ostensibly inferior targets can lead to negative self-  
 6 perceptions (Fardouly & Vartanian, 2015; Festinger, 1954). Making appearance-based upward  
 7 comparisons to other social media users has been found to play a role in body image disturbance  
 8 (Fardouly & Vartanian, 2015).

### 9 *Peer Relationships*

10 Building peer relationships, particularly intimate and reciprocal friendships is an  
 11 important aspect of adolescent development (Rose & Rudolph, 2006). Adolescents are  
 12 particularly sensitive to peer influence, acceptance and rejection (Blakemore & Mills, 2014).  
 13 According to Van Dijck (2008), digital images are a tool through which connections to others  
 14 may be fostered: a way of communicating to others what one is presently doing, analogous to  
 15 the traditional holiday postcard. In support of this, image-sharing through digital channels has  
 16 been found to trigger novel conversation and so may perform important communicative  
 17 functions within existing relationships (ten Bhomer, Helmes, O'Hara & van den Hoven, 2010).  
 18 It can also create a sense of intimacy with remote friends, through the sharing of visual  
 19 experiences that the receiver is not present physically present for (Villi, 2015). Interacting with  
 20 users, by providing feedback (e.g. comments and likes) on their self-generated content  
 21 (including images), has also been found to serve a range of interpersonal functions ranging  
 22 from an indication of friendship to an indication of the personal impact of the image (Suler,  
 23 2008).

1 *The Present Study*

2           The literature review has highlighted some of the important ways in which social  
 3 media, and image-sharing more specifically, may function within adolescents’ personal and  
 4 social development. However, empirical studies of adolescents’ image-sharing practices are  
 5 rare and have typically focused on specific aspects of image-sharing only, such as self-images  
 6 (e.g. Mascheroni et al., 2015) and appearance-related images (e.g. Chua & Chang, 2016).  
 7 Though such work is important, it ignores the broad spectrum of images that are typically  
 8 found on social media (Thelwall et al., 2015). It may also overlook some of the more  
 9 unknown, novel, and nuanced aspects of adolescents’ image-sharing practices, which can  
 10 only be elucidated through an inductive, exploratory and teen-centric approach.

11           The present study uses exploratory qualitative focus groups to understand how and  
 12 why adolescents create, share and respond to images on social media. The adoption of an  
 13 inductive teen-centric approach prioritises adolescents’ own experiences of image-sharing so  
 14 that the more diverse, novel and potentially complex aspects of these practices can be  
 15 explored. Given the heterogeneity of social media sites and how such heterogeneity of  
 16 features may affect adolescents’ image-sharing practices (Bayer et al., 2016), the present  
 17 study focuses on temporally persistent and identifiable social media imagery, which has been  
 18 communicated asynchronously with a large audience (e.g. Facebook and Instagram).

19

20

## 1 **Method**

### 2 *Participants*

3 An opportunity sample of 35 adolescents (Age  $M = 14.75$ ,  $SD = 1.39$ ,  $Range = 13-17$ ;  
4 Female  $N = 21$ , Male  $N = 14$ ) were recruited from three schools in North Yorkshire, UK, who  
5 were taking part in psychology taster days at a local university. All participants reported  
6 using multiple social networking sites on a regular basis (at least once daily) and were not  
7 specifically targeted due to a history of problematic social media (e.g. Chua & Chang, 2016)  
8 so as to reflect a group with normative social media use. Participants were assigned to focus  
9 groups based on pre-existing friendships. There were 7 focus groups in total, with 3-6  
10 participants per group. Focus groups lasted 21.24 - 36.40 minutes.

### 11 *Focus Group Design*

12 Image-sharing practices are co-constructed amongst peer groups, therefore focus  
13 groups were used to allow collaborative discussions (Uhls & Greenfield, 2011). Focus groups  
14 were semi-structured with facilitators using both physical stimuli (custom-made cards) and a  
15 questioning schedule to ensure key themes pertinent to the research questions were addressed,  
16 while still allowing flexibility to explore unexpected themes. Physical stimuli (e.g. images,  
17 news articles, and stories) are widely used in focus groups with adolescents to help prompt  
18 debate and discussion (Peterson-Sweeney, 2005).

19 *Physical Stimuli (cards)*. Eleven custom-made cards were used to prompt discussion in  
20 focus groups. Each card was blank on one side and contained a description of one of the  
21 different types of image that adolescents share on social media written on the other side. The  
22 types of images described on cards were chosen on the basis of pilot research, involving 30  
23 adolescents (aged 14-16), recruited from a co-educational secondary school in North Yorkshire.  
24 These adolescents were invited to create mind-maps listing “all the different types of images  
25 teenagers you know, such as your friends from school or home, but not celebrities, post on

1 social networking sites”. The author then pooled similar and synonymous terms from the mind-  
 2 maps together in an iterative process until distinct categories of different image types were  
 3 derived. Thirteen different types of images were identified, but two were excluded (risky  
 4 behaviour and nudes) following recommendations by the University Ethics Committee. See  
 5 Table 1 for description of image types shown on cards.

6 *Questioning Schedule.* The questioning schedule comprised questions that could be  
 7 used to explore each of the different types of images that featured in the cards. Questions aimed  
 8 to explore adolescents’ image sharing behaviour (e.g. “How do you decide which image to  
 9 post?”), their image-sharing motives (e.g. “What made you/what do you think made that person  
 10 decide to share that image?”) and their responses to the images shared (e.g. “Did you/they  
 11 receive any online interaction? How did it make you/them feel?”). Thus though the literature  
 12 review has highlighted some of the ways in which image-sharing might be linked to identity  
 13 and relational development during adolescence, questions were not specifically focused on this  
 14 to allow for a more inductive and exploratory approach. The schedule also included some  
 15 questions the focused on specific features of social media that facilitate image-sharing,  
 16 including editing techniques (e.g. “Can you tell me about your use of filters to edit images?”).  
 17 A definition of social media was not provided to the participants, although examples of social  
 18 media where content is temporally persistent, identifiable and communicated asynchronously  
 19 to a large audience (Facebook, Twitter and Instagram) were given to steer conversations.

20 *Procedure & Ethics*

21 Informed consent for the study was obtained in advance from head-teachers of  
 22 participating schools and parents. Focus groups took place on the university premises and  
 23 participant consent was gained on the day of the study. In each focus group, participants and  
 24 the focus group facilitator were seated around a table, with the cards arranged faced down on

1 the table. Once participants had been reminded of their right to withdraw and assured of  
 2 confidentiality, the focus group facilitator explained that cards contained descriptions of  
 3 different types of images adolescents share on social media, and were told they would be  
 4 invited to draw a card and then discuss it as a group. Participants were encouraged to be as  
 5 open and honest in discussions as possible. Once focus groups had started, the facilitator used  
 6 the questioning schedule to guide discussions. At the end of the study, participants were  
 7 debriefed and reminded of their right to withdraw. Focus groups were audio-recorded and  
 8 transcribed verbatim. The study adhered to British Psychological Society Ethical guidelines  
 9 and received approval from the relevant institutional ethics committee.

#### 10 *Analytic Procedure*

11 Thematic analysis was used to analyse the dataset, adopting the six step process  
 12 outlined by Braun & Clarke (2006). The process involved engaging in familiarization with  
 13 the dataset (Step 1), by reading transcripts and listening to recordings several times. Then  
 14 initial semantic codes (Step 2) were assigned to the data using Microsoft Excel. Semantic  
 15 coding was employed since this form of coding focuses on explicit and surface meanings  
 16 within the data, which is deemed most appropriate for answering the research questions  
 17 focused on experiences (Braun & Clarke, 2006). Step 2 also involved a process of code  
 18 refinement where each initial code and the corresponding data were examined to ensure  
 19 codes were unique and accurately reflected the data. Once coding was completed, the  
 20 researcher clustered similar and related codes to create initial themes (Step 3) and then  
 21 reviewed the content of themes against the coded extracts and entire dataset (Step 4) in order  
 22 to produce clearly defined themes (Step 5). As recommended by Braun and Clark (2006),  
 23 Steps 3-5 were performed in an iterative manner.

1           Throughout the analysis, the researcher adopted an inductive approach, allowing  
2 themes to emerge from the data rather than being guided by existing literature. Once themes  
3 had been derived, these were interpreted and contextualised in terms of psychological  
4 literature examining adolescent psychosocial development, as well as research examining  
5 image-sharing on social media and social media use more broadly. Once the final report was  
6 produced (Step 6), the author verified the analysis by independently checking themes against  
7 the original recordings and transcripts, and ensured themes were revised accordingly. As  
8 inter-rater reliability is not recommended for thematic analysis (Braun & Clarke, 2006), the  
9 researcher engaged in a process of member-checking to ensure the validity of themes  
10 (Lincoln & Guba, 1985). To do this, the researcher discussed the proposed themes with  
11 representatives from each of the focus groups ( $N = 15$ ), chosen by the relevant school  
12 teachers. These representatives were asked to comment on the accuracy of the themes in  
13 reflecting their image-sharing experiences, and the analysis was amended to reflect these  
14 discussions.

1

## Results

2

Thematic analysis led to the development of three separate, yet overlapping, themes that encapsulate adolescent image-sharing practices, including the motives underpinning them.

3

### *Presenting and Viewing Socially and Physically Attractive Selves*

4

The first theme encapsulates how adolescents use images to construct the self on social media, and how this version of the self was often bounded by perceptions of what is considered socially and physically attractive. Adolescents described sharing images containing a variety of personally-relevant content (including images conveying experiences, emotions, achievements, interests and possessions) in order to construct the self online. Typically, this content was described as representing their authentic offline self: *'You put your photo on there to express who you are really... I know it sounds a bit cliché'* (Male, 17). Asserting individuality to stand out from the crowd was important: *'You're trying to be different in your photo'* (Female, 13). However, the ability to express individuality seemed to be bounded by what was, and wasn't deemed acceptable by the peer group. For example, one adolescent with an interest in computing, said he would not post images reflecting this *'Because they get [...] "Lol, why aren't you doing football?"'* (Male, 14).

5

Appearing physically attractive in images was particularly important to the majority of adolescents; only images that met the appearance ideal standards adolescents set for themselves (which in turn reflected dominant cultural appearance ideals) were posted: *'You could just take one picture and there could be a tiny bit wrong with it and you'll be "No I don't want to post that. It's not perfect"'* (Female, 14). Adolescents described how, they and their peers would *'get all dressed up'* (Female, 14) in their best clothes for photographs, style their hair and - for girls - apply make-up. Furthermore, they were highly aware of the optimum lighting conditions

1 and best posing techniques for maximising their physical attractiveness, and often made use of  
 2 digital filters to enhance this:

3 *'But it suits some people, pouting [...] it don't suit me at all so I don't do it so I just smile*  
 4 *every-time and I don't smile with my teeth cause I don't like smiling with my teeth and I have*  
 5 *to sit in a way where I have to tilt the phone above my head up against the light and [...] I'll*  
 6 *like it that way'* (Female, 13)

7 Adolescents reported spending much time scrutinising their appearance and  
 8 deliberating over which images to share, often taking multiple images to choose the best: *'You*  
 9 *take fifty photos, delete forty nine and use one'* (Female, 13). Female adolescents were generally  
 10 perceived as being more invested in, and concerned about, their appearance than boys, and  
 11 were more candid when discussing the creation of appearance ideal selfies. However, boys still  
 12 reported engaging in appearance enhancement techniques. Filtering, for example, was equally  
 13 popular among boys and girls, and was described as being *"Like a boy's version of make-up"*  
 14 (Male, 14) due to its appearance enhancement qualities. Though appearance enhancement  
 15 strategies were widespread, adolescents were also critical of them. As one adolescent put it *'A*  
 16 *person can look completely different. I don't think anyone looks the same in photos'* (Female,  
 17 13). Some recognised how creating appearance ideal images encouraged them to scrutinise  
 18 their own appearance and recognised it as problematic: *"I think that's [sharing heavily edited*  
 19 *appearance ideal selfies] how a lot of self-esteem, like confidence is gone... down the hill"*  
 20 (Female, 13). It was also felt that the individuals responsible for the creation of image-editing  
 21 apps should be held accountable:

22 *' I like the way they do the apps to change pictures and add effects but [...] it makes me think*  
 23 *that, I don't know, by publishing an app like that, they are on about wanting to change you,*  
 24 *[...] intending to allow you to change yourself'* (Female, 13)

1           Attractiveness was also conveyed in symbolic ways. As the extract below shows, an  
 2 image of an adolescent playing the guitar could be used to represent a hobby, but could also be  
 3 used to attract potential romantic partners, since this behaviour was seen as attractive within  
 4 the peer group. Such identity displays require an understanding of the audience and how the  
 5 image would be perceived:

6           ‘*Some boys do it [share images of themselves playing musical instruments]. I think they maybe*  
 7 *do it because they obviously they really like what they do but [...] girls really like the idea of*  
 8 *boys playing the guitar so they kind of do it and lot of girls end up liking the picture.*’ (Female,  
 9 14).

10           Material goods and possessions were similarly used in a symbolic way; to convey  
 11 wealth, which was perceived as *socially* attractive among the sample. Thus material  
 12 possessions served as symbolic markers of an idealised and socially attractive identity,  
 13 especially among girls: ‘*It’s more females again [...] “just bought this mac stuff” mac make*  
 14 *up. [...] “Just been shopping” and [...] lay it all on the bed [...] like “look what I’ve got”*  
 15 (Male, 17). Many adolescents felt that ‘*showing off*’ material possessions in this way is  
 16 legitimate and ‘*understandable*’. However, many described experiencing jealousy in response  
 17 to these images and felt they encouraged self-doubt. Fortunately, this jealousy was often short-  
 18 lived:

19           ‘*If you don’t have them clothes and you could be thinking “Aww she’s gonna end up being*  
 20 *more popular than me” or “Aww she looks well pretty, I want some”. But then you’re thinking,*  
 21 *well they’ll be out of trend soon so there’s no point getting any of them*’ (Female, 13).

22           Despite presenting opportunities for sparking jealousy, adolescents reported occasions  
 23 where they enjoyed being exposed to physically and socially attractive identity displays of  
 24 others, especially those by slightly older adolescents or young adults. Such images sparked

1 curiosity and provided adolescents with the opportunity to think about possible identities and,  
2 in particular, future selves:

3 *‘Sometimes if you see someone with the prom dress on or it’s a special occasion, a wedding or*  
4 *something and you see them in a certain outfit then that can make you think [...] “oh yeah what*  
5 *are you going to wear?” [...] if that thing happens to you’ (Female, 15).*

### 6 ***Maintaining Offline Relationships***

7 For many adolescents, online interaction with friends was preferable to interaction with  
8 strangers. Friends and - to a lesser extent - family members were perceived as the primary  
9 audience for images shared on social media, and so image-sharing served a variety of functions  
10 within offline relationships. Adolescents described how images could be used to keep in touch  
11 with others, enabling them to share experiences, both mundane and exciting, which they were  
12 not physically present for.

13 *‘Well it [image-sharing] keeps you up-to-date. Say if it was a weekend and you haven’t seen*  
14 *your friend’s cause you are not at school, if you see a selfie [...] of them and a caption of what*  
15 *they are doing, it will just keep you up to date of how they are doing’ (Female, 14)*

16 *‘It was actually alright that she [an older cousin who had just been to prom] posted pictures*  
17 *and not just her, but like everyone else at like the prom cause [...] you could see [...] what*  
18 *everyone else was wearing and what the venue was like and everything.’ [Female, 15]*

19 Adolescents used images to connect with others in diverse ways. Images overlaid with  
20 words (e.g. inspirational quotes) were used to *‘show how you feel- [...] - without showing*  
21 *what’s going on’ (Female, 13)* and connect on a deeper level. Connections were also fostered  
22 through humour; adolescents described how they liked to *“have a laugh” (Male, 16)* with  
23 images on social media including through in-jokes with friends, especially amongst boys.

1 Posting humorous images would often lead to humorous online interaction in the comments  
2 that followed, as the following exchange shows:

3 P1: '*I once crumbled some skips into an egg- [...] And I took a picture of that and put it on*  
4 *Facebook*' (Male, 16)

5 I: '*Why?*' [\*laughter\*]

6 P1: '*Just cause I thought it were funny [\*laughter\*] but [...] I wouldn't do it normally.*'

7 P2: '*I found it funny*' (Male, 17)

8 P1: '*Yeah [...] I thought it was pretty funny, especially the comments that people put on it. It*  
9 *turns out [...] I called it a quegg, I mixed skips up with quavers but it was a skegg.*'

10 Adolescents discussed experiences of being exposed to the personally-relevant content  
11 of others, particularly friends. Many felt it was '*nice to see*' pictures capturing the experiences  
12 of others and felt pleased for the individuals whose positive experiences were captured: '*Like*  
13 *if I have a [...] good time and that makes you happy, so they're happy.*' (Female, 13). They  
14 often reflected on what the person who shared the image was thinking and feeling at the time  
15 of posting: '*It makes you think why they put that and what they're feeling.*' (Female, 14).

### 16 ***The importance of visible quantifiable feedback***

17 This final theme focuses on aspects of image-generated social interaction that are  
18 visible online to others and are easily quantifiable (likes), and how integral this is in shaping  
19 image-sharing practices. Adolescents, especially younger adolescents, described this form of  
20 interaction as driving both image creation and sharing.

1 *'And if you put a picture on you obviously going to want to get likes [...] otherwise you*  
2 *wouldn't put the picture on.'* (Female, 14)

3 *'Well if it's for Instagram like, that's the whole idea of Instagram, to put pictures on to get likes*  
4 *or just to post pictures. So when I post them it's for, I obviously post them for a reason to show*  
5 *what the occasion and what the event is and to get likes for it.'* (Female, 13)

6 Positive online interaction (such as “likes”, which were the most talked about form of  
7 visible online interaction) had potential to instantly boost confidence, especially if achieved on  
8 appearance ideal images: *'People say you look nice then you start feeling confident about*  
9 *yourself'* (Female, 14). It also served as social approval, affirming adolescents' choices, just  
10 as negative or no interaction could make them question these choices. For example, some  
11 adolescents described posting screenshots of message-based conversations with their peers  
12 during arguments, in order to garner support for their side of the argument (which was  
13 measured through likes and comments). Positive interaction was also described as a way of  
14 showing superiority over peers: *'A lot of people [...] show off [...] they want to say "Oh I'm*  
15 *better than you at art because I have more likes on this"'* (Female, 14). In contrast, negative  
16 feedback or indeed, the mere lack of interaction, could make adolescents doubt their sense of  
17 self:

18 *'It kind of puts you down a lot if it's a negative comment, but you kind of feel more confident,*  
19 *if someone is saying you look nice.'* (Female, 15)

20 *'And if you don't it-it doesn't lower your confidence it just kind of puts you down a bit thinking*  
21 *"Aww I really liked that photo, or why does no-one else like this photo?"'* (Female, 13)

22 Though some adolescents did not value visible online interaction, others, especially  
23 younger teens, went to great lengths to accumulate it, especially likes. They employed

1 strategies to maximise the likes accrued on images, including by only uploading images during  
 2 times when they believed more users would be online or privately messaging friends to ask  
 3 them to like their image publicly: *'When I do my profile pictures, I'll do it about like 9'o clock*  
 4 *on a Saturday night cause that's when there will be three or four hundred people online so then*  
 5 *you'll tend to get more likes'* (Female, 14). Furthermore, some adolescents described how girls  
 6 sometimes shared self-images that exposed their body parts since such images were perceived  
 7 to gain more likes. Despite gaining more likes for these images, they were likely to be judged  
 8 by their peers for posting such images: *'I think a lot of the time [...] the type of the peop- type*  
 9 *of girls that put [...] revealing photos on [...] you know what kind of person they are so I don't*  
 10 *think it's really surprising'* (Female, 17).

11 In general, visible online interaction from friends and family was preferred: *'If my best*  
 12 *friends or my family or my boyfriend like it, I'll feel happier than just some person I've got on*  
 13 *Facebook'* (Female, 13). Many adolescents reported that privacy of images was important and  
 14 interaction with unknown others made them uncomfortable: *'Sometimes it's kind of weird*  
 15 *because you'll see really weird kind of people liking your pictures when you're not even friends*  
 16 *with them or you have no idea who they are'* (Female, 15). However, some adolescents were  
 17 less concerned about image privacy due to the perceived lack of identifying information  
 18 contained within them. Others deliberately engaged in strategies to increase their social media  
 19 audience and potential to accrue likes. For example, some used specific hashtags to encourage  
 20 online interaction from strangers such as “#likeforlike” (where giving a like to a stranger’s  
 21 image is reciprocated with a like on one’s own image). Some girls reported welcoming positive  
 22 online interaction from strangers, particularly if the feedback was received on appearance ideal  
 23 selfies:

1 *'But then it is also nice having people that you don't really know [like your selfies], because*  
 2 *if they like it and you don't know them [...] you think "oh they must like the look of me" even*  
 3 *though we don't really know each other so you'll feel good about yourself.'* (Female, 13)

#### 4 **Discussion**

5 The present research aimed to understand adolescent image-sharing practices. It  
 6 focused specifically on social media where temporally persistent and identifiable content is  
 7 communicated asynchronously and to a large audience. Throughout the focus groups, image-  
 8 sharing was constructed as important to most adolescents, who invested substantial time and  
 9 effort in creating, sharing and viewing such social media images. Through the process of  
 10 thematic analysis, three overlapping themes were developed that encapsulate the diverse and  
 11 pluralistic nature of adolescent image-sharing practices, the motivations underpinning them,  
 12 and the function image-sharing serves within the broader context of adolescent identity and  
 13 social development.

14 Consistent with SPT (Baumeister, 1982; Goffman, 1959) and existing research  
 15 examining image-sharing practices (boyd, 2014; Chua & Chang, 2016; Macheroni et al.,  
 16 2015), adolescents described engaging in self-presentations on social media for two key inter-  
 17 related motives; to convey an authentic yet idealised self and to please their audience. More  
 18 specifically, adolescents used images in diverse, creative and subtle ways to cultivate an  
 19 online identity. Their online identity was an authentic yet embellished version of their offline  
 20 self, informed by what they perceived to be both socially and physically attractive to others,  
 21 especially among their peer-group. Adolescents used feedback received in response to images  
 22 (especially likes) to judge whether their identity displays had successfully pleased others.  
 23 They seemed particularly concerned about social feedback delivered in this way, perhaps  
 24 reflecting their developmentally heightened sensitivity to social information (Blakemore &  
 25 Mills, 2014).

1           The conceptions of social and physical attractiveness that adolescents aspired to in  
2 their image-based self-presentations were heavily influenced by the mass media. Branded  
3 goods and material products were used as markers of a desirable identity, mimicking how  
4 they are used in advertising and mainstream media more broadly (Dittmar, 2007; Kasser,  
5 2016). Similarly, notions of physical attractiveness were clearly informed by the idealised  
6 appearance of mainstream media models. The role of the mass media in shaping adolescents'  
7 identity construction is well-documented (Lloyd, 2002; Dittmar, 2007); it would seem that  
8 social media provides a platform for reconstructing mainstream media images to assume  
9 these idealised identities. Furthermore, both looking good and consumption of material  
10 possessions are integral features of Western consumer culture values (Dittmar, 2007; Kasser,  
11 2016). Adolescents desire to reproduce these values in their social media images may reflect  
12 their broader endorsement of the consumerist values that dominate their cultural environment.  
13 Positive feedback received on such images may help reinforce consumer identities (Walther  
14 et al., 2011). Future research should consider the role of image-sharing in consumer  
15 socialisation of both online and offline identities more fully.

16           Adolescents described employing time-consuming strategies to produce appearance  
17 ideal images; a practice that involved high levels of self-scrutiny and criticism. In sharing  
18 these images, adolescents exposed themselves to appearance-related feedback from others,  
19 with some explicitly inviting such feedback (e.g. engaging with “#like4rate”). These findings  
20 are consistent with Chua and Chang (2016) who described how image-sharing practices  
21 created a competitive online appearance culture among adolescent girls living in Singapore,  
22 which was similarly informed by cultural appearance ideals. It is also cause for concern,  
23 given that appearance scrutiny, exposure to appearance ideal images, and appearance-related  
24 feedback from others, have all been implicated in body image disturbances (e.g. Grabe, Hyde  
25 & Lindberg, 2007; Jones, Vigfusdottir & Lee, 2004). It is likely that repeated engagement in

1 appearance ideal image-sharing practices may contribute to negative body image among  
2 adolescents, as initial research in this field indicates (Fardouly & Vartanian, 2015; Meier &  
3 Grey, 2014). Interestingly, some adolescents described an awareness of the negative impact  
4 of such behaviour but engaged in them anyways, and this discrepancy between attitudes and  
5 behaviours is worthy of further examination. Consistent with previous research, girls were  
6 perceived as being more image-conscious than boys, spending more time creating and  
7 sharing appearance ideal selfies than boys (Manago et al., 2008; Mascheroni et al., 2015).  
8 Such findings could reflect girls' experiences of heightened social pressure to conform to  
9 social norms, particularly those surrounding appearance (e.g. Jones et al., 2004).  
10 Alternatively, girls may simply be more comfortable discussing these issues (Radmacher &  
11 Azmitia, 2006).

12 Images served an important communicative function; adolescents described sharing  
13 images through social media to maintain offline relationships. Adolescents used images to  
14 invite social media friends (who were typically offline friends) into their personal and private  
15 world. This form of visual self-disclosure seemed to facilitate closeness, in the same way  
16 verbal and textual self-disclosure facilitates closeness in other forms of face-to-face and  
17 computer-mediated communication (Nguyen, Bin & Campbell, 2012). Adolescents described  
18 positive experiences of receiving images from friends that showed activities for which they  
19 could not be present (Van Dijck, 2008). Images were also shared in fun and spontaneous  
20 ways to incite humorous interaction; creating shared experiences and building relationships.

21 Not all images were shared with prosocial intent; sometimes adolescents used images  
22 to show superiority and evoke jealousy, actively encouraging upward comparison against  
23 them. Consistent with social comparison theory (Festinger, 1954), adolescents reported  
24 responding negatively to such displays from peers (albeit temporarily). Furthermore, although  
25 adolescents valued being exposed to the self-expressive images of others, particularly slightly

1 older individuals, since it afforded them the opportunity to voyeuristically explore possible  
 2 identities, they also reported experiencing jealousy after viewing some images. Images  
 3 conveying consumer identities (e.g. containing branded goods) were particularly likely to be  
 4 used to evoke jealousy. Such findings are consistent with research suggesting that  
 5 endorsement of consumer values may have negative consequences for relationships (for  
 6 review, see Kasser, 2016). Future research should seek to understand the possible  
 7 interpersonal relational consequences of competitive identity displays, within the wider  
 8 context of consumer culture.

9         The prospect of receiving visible quantifiable feedback on images (likes) was an  
 10 important motivator of adolescent image-sharing practices. Likes influenced the type of  
 11 content adolescents shared, reinforced self-perceptions, and impacted upon mood.  
 12 Furthermore, adolescents invested time and effort in the active pursuit of likes; engaging in  
 13 strategies to maximise the number of likes they achieved, such as uploading images only at  
 14 certain times of day or using hashtags to increase image visibility. Younger adolescents and  
 15 girls placed more on value on visible quantifiable feedback, in-line with offline research  
 16 suggesting both groups are more concerned with social approval (Sumter, Bokhorst,  
 17 Steinberg, & Westenberg, 2009). Consistent with Mascheroni et al. (2015), sharing revealing  
 18 self-images was also perceived as a strategy for gaining more likes among girls. Yet despite  
 19 gaining more likes, girls sharing these images were judged negatively by their peers. Thus in  
 20 contrast to many adolescents' perceptions, social media likes may not reflect actual peer  
 21 approval. Such findings may also reflect complex societal discourses surrounding female  
 22 sexuality, where visual sexual identities are simultaneously encouraged and discouraged  
 23 (Gill, 2007; Mascheroni et al., 2015).

24         Despite adolescents generally valuing online privacy, some were willing to  
 25 compromise this if it increased the likelihood of receiving more likes on their images and

1 some that likes received from strangers were particularly satisfying. There were further  
 2 conflicting beliefs surrounding image-privacy, with some expressing the belief that this was  
 3 less important than other forms of privacy. These novel findings highlight the complexities  
 4 involved in adolescents' negotiations of privacy in relation to image-sharing, echoing their  
 5 complex discussions of privacy on social media more broadly (e.g. boyd, 2014). Given the  
 6 high stakes involved in breaches of online privacy, it is important that the apparent trade-off  
 7 between privacy and desire for social approval during adolescence be more fully understood,  
 8 and knowledge about this integrated into social media literacy programmes.

9 *Limitations*

10         Given the apparent influence of immediate peer-, and broader consumer-, culture on  
 11 image-sharing practices, the generalisability of the findings is limited. That said, identity and  
 12 social development are regarded as universal characteristics of the adolescent years (Arnett &  
 13 Hughes, 2012), and so it is likely that image-sharing may serve broadly similar functions  
 14 among adolescents, even among diverse groups. In support of this, Mascheroni et al. (2015)  
 15 found recurring themes of self-presentation in adolescents' descriptions of their image-  
 16 sharing practices across three different European countries (UK, Italy and Spain).  
 17 Furthermore, Chua and Chang (2016) found image-sharing evoked similar appearance  
 18 concerns among girls in Singapore to those described by the adolescents in the present study.

19         Focus groups were chosen as a method of data collection in the present study since  
 20 the focus group environment enables the co-creation of descriptions of image-sharing,  
 21 mirroring the co-creative nature of such practices in the real world. However, some  
 22 adolescents can feel uneasy in a group setting or may be overpowered by more vocal group  
 23 members. Allowing participants to engage in focus groups that reflected their naturally  
 24 occurring friendship groups seemed to minimise this. Future research could explore such

1 practices on a more individual level e.g. using interviews. An individual approach may best  
2 suited to investigation of more sensitive aspects of image-sharing behaviour (e.g. sexting).  
3 Furthermore, adolescents were encouraged to focus on images shared with a large audience  
4 through identifiable profiles where content is asynchronously communicated and persistently  
5 available. Future research, focused on image-sharing through private, anonymous,  
6 synchronous or ephemeral social media channels may yield alternative insights into  
7 adolescent image-sharing practices.

### 8 *Conclusion*

9         Adolescents invest substantial time and effort creating, sharing and viewing social  
10 media images. Understood within the broader context of adolescent development, image-  
11 sharing provides a useful tool for adolescents to cultivate identity, allowing experimentation  
12 with possible selves, though such selves are typically bound by what is perceived as socially  
13 and physically attractive to others. It also served an important communicative function in  
14 adolescent relationships, particularly facilitating the shared experiences with others who  
15 could not be physically present. However, the competitive cultural environment fostered by  
16 image-sharing may have deleterious consequences, particularly in relation to body image and  
17 social relationships, and future research should seek to examine this further.

18

19

1 Table 1: Categories of images listed on cards used as physical prompts in focus groups.

Description
<i>Food and Drink: Meals in, meals out, homemade meals, healthy or unhealthy, coffee, soft drinks, desserts, snacks etc.</i>
<i>Holidays: Family holidays, holidays with friends, weekend trips away, holidays abroad, holidays in England, etc.</i>
<i>Selfies: Images of the self, taken by the self.</i>
<i>Animals: Pets, wild animals, animals at the zoo etc.</i>
<i>Objects and Possessions: Clothes, make-up, electronics and accessories</i>
<i>Screenshots: No description in transcript</i>
<i>Scenery and art: Landscapes, tourist attractions, countryside, your own artwork and artwork of others</i>
<i>Photos of you with others: Photographs of family, friends, boyfriends/girlfriends, and group photos.</i>
<i>Famous people: Celebrities, sports personalities, models, movie stars, and singers.</i>
<i>Occasions and special events: Birthdays, family outings, weddings, evenings out with friends etc. school dances, halloween parties etc.</i>
<i>Hobbies: Sport, gym, fitness, singing and drama, musical instruments, games and other hobbies.</i>
<i>Images with words: Inspiration quotes, jokes, memes and advertisements etc.</i>

2

3

## References

- 1  
2 Anderson, M., & Jiang, J. (2018). Teens, Social media & Technology Overview 2018.  
3 Retrieved from <http://www.pewinternet.org/2018/05/31/teens-social-media->
- 4 Arnett, J. J., & Hughes, M. (2012). *Adolescence and Emerging Adulthood: A Cultural*  
5 *Approach*. Harlow, England: Pearson Education Limited.
- 6 Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual review of*  
7 *psychology*, 52(1), 1-26. doi: 10.1146/annurev.psych.52.1.1
- 8 Baumeister, R. F. (1982). A self-presentational view of social phenomena. *Psychological*  
9 *Bulletin*, 91(1), 3-26. doi: 10.1037/0033-2909.91.1.3
- 10 Bayer, J. B., Ellison, N. B., Schoenebeck, S. Y., & Falk, E. B. (2016). Sharing the small  
11 moments: ephemeral social interaction on Snapchat. *Information, Communication &*  
12 *Society*, 19(7), 956-977. doi: 10.1080/1369118X.2015.1084349
- 13 Blakemore, S. J., & Mills, K. L. (2014). Is adolescence a sensitive period for sociocultural  
14 processing? *Annual Review of Psychology*, 65, 187-207. doi: 10.1146/annurev-psych-  
15 010213-115202
- 16 Bloomberg (June 2, 2016). Snapchat passes Twitter in Daily Usage. Retrieved from  
17 [https://www.bloomberg.com/news/articles/2016-06-02/snapchat-passes-twitter-in-](https://www.bloomberg.com/news/articles/2016-06-02/snapchat-passes-twitter-in-daily-usage)  
18 [daily-usage](https://www.bloomberg.com/news/articles/2016-06-02/snapchat-passes-twitter-in-daily-usage)
- 19 boyd, D. (2014). *It's complicated: The social lives of networked teens*. New Haven, CT: Yale  
20 University Press.
- 21 Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research*  
22 *in Psychology*, 3(2), 77-101. doi: 10.1191/1478088706qp063oa

- 1 Chua, T. H. H., & Chang, L. (2016). Follow me and like my beautiful selfies: Singapore  
2 teenage girls' engagement in self-presentation and peer comparison on social media.  
3 *Computers in Human Behavior, 55*, 190-197.
- 4 Dittmar, H. (2007). *Consumer culture, identity and well-being: The search for the 'good life*  
5 *'and the 'body perfect'*. Hove, England: Psychology Press.
- 6 Erikson, E.H. (1968) *Youth, Identity and Crisis*. NewYork, NY: Norton.
- 7 Fardouly, J., & Vartanian, L. R. (2015). Negative comparisons about one's appearance  
8 mediate the relationship between Facebook usage and body image concerns. *Body*  
9 *Image, 12*, 82-88. doi: 10.1016/j.bodyim.2014.10.004
- 10 Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*(2), 117-  
11 140. doi: 10.1177/001872675400700202
- 12 Gill, R. (2007). *Gender and the Media*. Cambridge: Polity Press.
- 13 Goffman, E. (1959). *Presentation of Self in Everyday Life*. Garden City, NY: Doubleday  
14 Anchor Books.
- 15 Grabe, S., Hyde, J. S., & Lindberg, S. M. (2007). Body objectification and depression in  
16 adolescents: The role of gender, shame, and rumination. *Psychology of Women*  
17 *Quarterly, 31*(2), 164-175. doi:10.1111/j.1471-6402.2007.00350.x
- 18 Halpern, M., & Humphreys, L. (2016). Iphoneography as an emergent art world. *New Media*  
19 *& Society, 18*(1), 62-81. doi:10.1177/1461444814538632
- 20 Herring, S. C., & Kapidzic, S. (2015). Teens, gender, and self-presentation in social media. In  
21 J. D. Wright (Ed.), *International encyclopedia of social and behavioral sciences* (pp.  
22 146-152). Oxford, England: Elsevier.

- 1 Instagram (2019). *Instagram Statistics*. Retrieved from <https://instagram-press.com/our-story/>
- 2 Johnson, B. K., & Van Der Heide, B. (2015). Can sharing affect liking? Online taste  
3 performances, feedback, and subsequent media preferences. *Computers in Human*  
4 *Behavior, 46*, 181-190. doi: 10.1016/j.chb.2015.01.018
- 5 Jones, D. C., Vigfusdottir, T. H., & Lee, Y. (2004). Body image and the appearance culture  
6 among adolescent girls and boys an examination of friend conversations, peer  
7 criticism, appearance magazines, and the internalization of appearance ideals. *Journal*  
8 *of Adolescent Research, 19*(3), 323-339. doi:10.1177/0743558403258847.
- 9 Kapidzic, S., & Herring, S. C. (2014). Race, gender, and self-presentation in teen profile  
10 photographs. *New Media & Society, 17*, 958-976. doi: 1461444813520301.
- 11 Kasser, T. (2016). Materialistic values and goals. *Annual Review of Psychology, 67*, 489-514.  
12 doi: 10.1146/annurev-psych-122414-033344
- 13 Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.
- 14 Lloyd, B. T. N. (2002). A conceptual framework for examining adolescent identity, media  
15 influence, and social development. *Review of General Psychology, 6*(1), 73-91. doi:  
16 10.1037/1089-2680.6.1.73
- 17 Madden, M., Lenhart, A., Duggan, M., Cortesi, S., & Gasser, U. (2013). Teens and  
18 Technology 2013. Retrieved from [http://www.pewinternet.org/2013/03/13/teens-and-](http://www.pewinternet.org/2013/03/13/teens-and-technology-2013/)  
19 [technology-2013/](http://www.pewinternet.org/2013/03/13/teens-and-technology-2013/)
- 20 Manago, A. M., Graham, M. B., Greenfield, P. M., & Salimkhan, G. (2008). Self-  
21 presentation and gender on MySpace. *Journal of Applied Developmental Psychology,*  
22 *29*(6), 446-458. doi: 10.1016/j.appdev.2008.07.001

- 1 Mascheroni, G., Vincent, J., & Jimenez, E. (2015). "Girls are addicted to likes so they post  
2 semi-naked selfies": Peer mediation, normativity and the construction of identity  
3 online. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 9(1),  
4 article 1. doi: 10.5817/CP2015-1-5
- 5 Meeker, M. (2015). Internet trends 2015 – Code Conference. Retrieved from:  
6 <http://www.kpcb.com/blog/2015-internet-trends>
- 7 Meier, E. P., & Gray, J. (2014). Facebook photo activity associated with body image  
8 disturbance in adolescent girls. *Cyberpsychology, Behavior, and Social Networking*,  
9 17(4), 199-206. doi: 10.1089/cyber.2013.0305
- 10 Michikyan, M., & Suárez-Orozco, C. (2016). Adolescent media and social media use  
11 Implications for development. *Journal of Adolescent Research*, 31(4), 411-414. doi:  
12 10.1177/0743558416643801
- 13 Nguyen, M., Bin, Y. S., & Campbell, A. (2012). Comparing online and offline self-disclosure:  
14 A systematic review. *Cyberpsychology, Behavior, and Social Networking*, 15(2), 103-  
15 111. doi: 10.1089/cyber.2011.0277.
- 16 Ofcom (2019). Children and parents: Media use and attitudes report 2018.  
17 [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0024/134907/Children-and-Parents-](https://www.ofcom.org.uk/_data/assets/pdf_file/0024/134907/Children-and-Parents-Media-Use-and-Attitudes-2018.pdf)  
18 [Media-Use-and-Attitudes-2018.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0024/134907/Children-and-Parents-Media-Use-and-Attitudes-2018.pdf)
- 19 Peterson-Sweeney, K. (2005). The use of focus groups in pediatric and adolescent research.  
20 *Journal of Pediatric Health Care*, 19(2), 104-110. doi:10.1016/j.pedhc.2004.08.006
- 21 Radmacher, K., & Azmitia, M. (2006). Are there gendered pathways to intimacy in early  
22 adolescents' and emerging adults' friendships? *Journal of Adolescent Research*, 21(4),  
23 415-448. doi: 10.1177/0743558406287402

- 1 Rose, A. J., & Rudolph, K. D. (2006). A review of sex differences in peer relationship  
2 processes: potential trade-offs for the emotional and behavioural development of girls  
3 and boys. *Psychological Bulletin*, 132(1), 98-131. doi: 10.1037/0033-2909.132.1.98
- 4 Sherman, L. E., Payton, A. A., Hernandez, L. M., Greenfield, P. M., & Dapretto, M. (2016).  
5 The Power of the Like in Adolescence Effects of Peer Influence on Neural and  
6 Behavioral Responses to Social Media. *Psychological Science*, 7, 1027-1035. doi:  
7 10.1177/0956797616645673
- 8 Suler, J. (2008). Image, word, action: Interpersonal dynamics in a photo-sharing community.  
9 *CyberPsychology & Behavior*, 11(5), 555-560. doi: 10.1089/cpb.2007.0153
- 10 Sumter, S. R., Bokhorst, C. L., Steinberg, L., & Westenberg, P. M. (2009). The developmental  
11 pattern of resistance to peer influence in adolescence: Will the teenager ever be able to  
12 resist?. *Journal of Adolescence*, 32(4), 1009-1021. doi:  
13 10.1016/j.adolescence.2008.08.010
- 14 ten Bhömer, M., Helmes, J., O'Hara, K., & Van Den Hoven, E. (2010, October). 4Photos: a  
15 collaborative photo sharing experience. In *Proceedings of the 6th Nordic Conference*  
16 *on Human-Computer Interaction: Extending Boundaries*, 52-61. doi:  
17 10.1145/1868914.1868925
- 18 Snap Inc (2018). *Snap Inc. Reports Second Quarter 2018 Results*. Retrieved from  
19 [https://investor.snap.com/~/\\_media/Files/S/Snap-IR/press-release/q2-18-earnings-  
20 release.pdf](https://investor.snap.com/~/_media/Files/S/Snap-IR/press-release/q2-18-earnings-<br/>20 release.pdf)
- 21 Statista (2019). *Number of smartphone users worldwide from 2014 to 2020 (in billions)*.  
22 <https://www.statista.com/statistics/330695/number-of-smartphone-users-worldwide/>

- 1 Thelwall, M., Goriunova, O., Vis, F., Faulkner, S., Burns, A., Aulich, J., Stuart, E., &  
2 D’Orazio, F. (2015). Chatting through pictures? A classification of images tweeted in  
3 one week in the UK and USA. *Journal of the Association for Information Science and*  
4 *Technology*. doi:10.1002/asi.23620
- 5 Uhls, Y. T., & Greenfield, P. M. (2012). The value of fame: Preadolescent perceptions of  
6 popular media and their relationship to future aspirations. *Developmental Psychology*,  
7 *48*, 315-326. doi: 10.1037/a0026369
- 8 Van Dijck, J. (2008). Digital photography: communication, identity, memory. *Visual*  
9 *Communication*, *7*(1), 57-76. doi: 10.1177/1470357207084865
- 10 Villi, M. (2015). “Hey, I’m here Right Now”: Camera phone photographs and mediated  
11 presence. *Photographies*, *8*(1), 3-22. doi: 10.1080/17540763.2014.968937
- 12 Walther, J. B., Liang, Y. J., DeAndrea, D. C., Tong, S. T., Carr, C. T., Spottswood, E. L., &  
13 Amichai-Hamburger, Y. (2011). The effect of feedback on identity shift in computer-  
14 mediated communication. *Media Psychology*, *14*(1), 1-26. doi:  
15 10.1080/15213269.2010.547832
- 16 Zhao, S., Grasmuck, S., & Martin, J. (2008). Identity construction on Facebook: Digital  
17 empowerment in anchored relationships. *Computers in Human Behavior*, *24*, 1816-  
18 1836. doi: 10.1016/j.chb.2008.02.012
- 19