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4 **"You take fifty photos, delete forty nine and use one": A Qualitative Study of Adolescent**
5 **Image-Sharing Practices on Social Media**
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27 **Key Words:** Social Media, Image Sharing, Digital Photography, Adolescence, Teenagers,
28 Social Networking Sites

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

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Abstract

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

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

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

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

Social Influences on Identity

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

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

24

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).

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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

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

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

Procedure & Ethics

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

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

Analytic Procedure

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

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

1 **Results**

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

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

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

17 Appearing physically attractive in images was particularly important to the majority of
18 adolescents; only images that met the appearance ideal standards adolescents set for themselves
19 (which in turn reflected dominant cultural appearance ideals) were posted: *'You could just take*
20 *one picture and there could be a tiny bit wrong with it and you'll be "No I don't want to post*
21 *that. It's not perfect"'* (Female, 14). Adolescents described how, they and their peers would
22 '*get all dressed up'* (Female, 14) in their best clothes for photographs, style their hair and - for
23 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

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

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

Maintaining Offline Relationships

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

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

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

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

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

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

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

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

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

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

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

The importance of visible quantifiable feedback

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

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

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

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

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

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

Though some adolescents did not value visible online interaction, others, especially 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:

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

Discussion

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

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

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

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

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

Limitations

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

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

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

Conclusion

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

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

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

2

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