

## 2.4: BODY IMAGE AND ADOLESCENT GIRLS' SELFIE POSTING, EDITING, AND INVESTMENT

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The authors surveyed adolescent girls to see whether selfie activities are related to the girls' self-objectification, appearance anxiety, and body esteem.

Some argue that selfies, or photographic self-portraits uploaded to social media websites, are tools of empowerment that allow users to control how they are seen by others (e.g., Simmons, 2013). Reflecting this thinking, in 2014 the Dove Self-Esteem Project released a short film called *Selfie*, in which selfies were presented, through the perspectives of adolescent girls, as an empowering way for "them to redefine beauty one picture at a time" (Moss, 2014). In the video, teen girls and their mothers were trained to take a good selfie and were encouraged to accept diverse bodies and appearances, especially their own. It is a heartwarming story of mothers and daughters listening to each other's appearance insecurities and learning how to overcome them together.

At the same time, these girls and their mothers focused on particular body parts and appearance attributes that were deemed most appealing to others, and how to present themselves in ways others will appreciate. At the end of the video, the girls hang selfies in an art gallery, while observers attach Post-it notes to the pictures, noting their success in presenting particular body parts in an appealing manner.

Selfies provide opportunities to scrutinize one's appearance from an outsider's perspective and to verify others' approval (or lack thereof) of one's appearance. When people apply this perspective to the self, they are likely to learn to view themselves as objects to be looked at by others, a tendency called self-objectification (Fredrickson & Roberts, 1997). This is a concern for adolescent girls' mental and behavioral health because self-objectification is related to low interoceptive awareness (diminished ability to detect one's body signals), diminished capacity to achieve optimal concentration in a given task, and increased appearance anxiety and body shame (Moradi & Huang, 2008). In turn, these consequences put girls and women at risk for eating disorders, depression, and sexual dysfunction. Thus, one could think of self-objectification as a gateway to the dark side of adolescence, leading to some of the most prevalent health concerns adolescents, especially girls, face.

In light of these perspectives, it is important to examine the role of selfies in female adolescents' body image. Are selfies a tool of empowerment or detriment to adolescents' experiences? To answer this question, we conducted a survey of female adolescents (ages 14–17) that was designed to assess different facets of selfie activities, self-objectification, and both negative and positive subjective evaluation of one's appearance.

### Selfie Culture

In 2013, Oxford Dictionaries declared the word selfie the word of the year. In 2017, a YouGov poll of American adults showed that 94% were familiar with the term, and 69% had taken at least one selfie (Bame, 2017). In light of its popularity, this phenomenon has garnered scholarly interest from both the qualitative and quantitative perspectives.

Qualitative research, which undertakes in-depth investigations of people's experiences, has generated differing perspectives of selfies. On the one hand, selfies are seen as self-therapeutic. They can create an image of the self that is in opposition to the demands of a consumer culture that prescribes narrow conceptions of attractiveness (Kedzior & Allen, 2016). Although selfies can feel empowering to the individual, they simultaneously reproduce and contribute to a sexually objectifying culture and maintain social hierarchies based on appearance (Kedzior & Allen, 2016). Additionally, adolescent girls perceive that sexualized selfies garner more likes, but the reaction to this observation varied greatly (Davidson & Ribak, 2017). Some teen girls defended the practice as an expression of their self-identity, whereas others found it problematic, signaling a lack of self-confidence.

Quantitative research, which uses numerical data to draw statistically supported conclusions, has tended to suggest that selfies are disempowering. Based on a nationally representative sample of US social media users, Fox and Vendemia (2016) found that women put more effort into presenting a socially desirable physical appearance online by editing photos, and women's body image and tendency to compare themselves negatively to ideal others drove this behavior. Additionally, selfie behaviors were associated with adolescent girls' over-evaluation of shape and weight, body dissatisfaction, dietary restraint, and internalization of the thin ideal (McLean, Paxton, Wertheim, & Masters, 2015).

In light of the findings from both qualitative and quantitative researchers, it is clear that engaging with digital and social media is consequential for adolescent girls (McLean et al., 2015). Throughout a complex system of media messages from multiple platforms, girls are reminded that their appearance is a vital criterion on which their value is based and that they should make sexiness a priority (Ward & Aubrey, 2017). At the same time, adolescents experience increased pressure to conform to culturally sanctioned gender roles (Hill & Lynch, 1983). Pubertal changes, alongside new experiences with dating, create expectations that girls behave in more feminine, sexually attractive ways.

Another key developmental hallmark of adolescence is egocentrism. As adolescents' brains develop, they start to conceptualize their own thoughts and the thoughts of others, which represents major cognitive development (Elkind, 1967). However, they fail to differentiate between their own mental preoccupations and what others are thinking about. Thus, they tend to believe that other people are as obsessed with their behavior and appearance as they are, a phenomenon known as imaginary audience beliefs. Social media use is related to imaginary audience ideation (Cingel & Krmar, 2014), likely because adolescents use social media to control the way their imagined audience sees them.

### Research Questions and Procedure

For this study, we took inspiration from objectification theory (Fredrickson & Roberts, 1997). Because selfies allow users to present themselves to others in their social network and to consider their network's evaluations of their appearance, we reasoned that selfie activities would be associated with self-objectification. Further, we examined the relationships between selfie activities and adolescent girls' subjective evaluations of their appearance, both from a negative (e.g., appearance anxiety) and from a positive (e.g., body esteem) point of view. We distinguished between three types of selfie activities: frequency of selfie posting, editing selfies, and one's investment into selfies (McLean et al., 2015). Editing and investment imply that users scrutinize their appearance before and after posting selfies; thus, we reasoned that they should be examined separately from the sheer frequency of posting selfies. We posed three research questions.

- RQ1: Are selfie activities related to adolescent girls' self-objectification?
- RQ2: Are selfie activities related to adolescent girls' appearance anxiety?
- RQ3: Are selfie activities related to adolescent girls' body esteem?

We wanted to explain the unique relationships between selfie behaviors and body image. Therefore, it was important to control for other variables that could explain adolescent girls' body image. Doing so is a rigorous way to test these links because it rules out the possibility that the associations are simply spurious, or attributable to some unmeasured third variable. In our study, we controlled for participants' body mass index (BMI), age, race, frequency of social media use, and imaginary audience beliefs.

We addressed these research questions using a cross-sectional survey of adolescent girls. This sample was recruited through a private survey firm. Adults who had a daughter between the ages of 14 and 17 were contacted to see if their daughter would like to participate in the survey for a small amount of monetary compensation. If the parent consented and the daughter assented, the adolescent completed a 20-minute online survey. Of the 296 participants who completed the survey, 18 participants were dropped from the analyses because they failed attention checks. Thus, the final sample consisted of 278 adolescent girls ages 14–17 ( $M_{\text{age}} = 15.57$ ,  $SD = 1.11$ , 64.4% White/European American, 10.4% Black/African American, 8.3% Latina, 16.7% other).

We measured selfie posting frequency, selfie editing, and selfie investment. First, participants were provided with a definition of selfies and asked to report how often on a 6-point scale they post selfies (0 = Never, 1 = Very Infrequently, 5 = Very Frequently). For selfie editing we asked how often participants used eight editing techniques on their selfies before posting (e.g., getting rid of red eye) on a 5-point scale (1 = Never, 5 = Always). For selfie investment, we asked three questions that assessed how much participants were preoccupied with their selfies before posting. Participants indicated on a slider scale from 0–100 where they fell between two extremes (e.g., "I don't care what photos I post" versus "I carefully select the best photo to post").

For the body image variables, we used established and validated scales. To measure self-objectification, participants filled out the Self-Objectification Beliefs and Behaviors Scale (Lindner & Tantleff-Duncan, 2017). Example items included "looking attractive to others is more important to me than being happy with who I am inside" and "I choose specific clothing or accessories based on how they make my body appear to others" (1 = Strongly Disagree, 5 = Strongly Agree). Participants also completed the Social Appearance Anxiety Scale (Hart, Flora, Palyo, Fresco, Holle, & Heimberg, 2008). Example items included "I get tense when it is obvious people are looking at me" and "I am uncomfortable when I think others are noticing flaws in my appearance" (1 = Definitely Disagree, 5 = Definitely Agree). Participants completed the Appearance Evaluation Subscale of the Body-Esteem Scale (Mendelson, Mendelson, & White, 2001). Example items included "I like my looks just the way they are" and "I like the way I look without my clothes" (1 = Strongly Disagree, 5 = Strongly Agree).

BMI was calculated from participants' self-reported height and weight. Race was treated as a dichotomous variable (1 = White, 0 = all other). Participants reported on a 6-point scale how often they used social media (0 = Never, 5 = Very Frequently). Finally, participants completed the New Imaginary Audience Scale (Goossens, Beyers, Emmen, & van Aken, 2002), consisting of 23 items assessing how often the adolescents imagined themselves in different situations (e.g., "being admired for being cool," 1 = Never, 4 = Often).

### Findings: It's a Matter of How Adolescents Approach Selfies

To answer our research questions, we conducted multiple regression analyses. This is a technique that allowed us to test the relationship between the selfie behaviors and the three self-image variables, while simultaneously controlling for the other variables that might be related to body image. In the following, we will report the results of three regression models, one for each body image variable. In the models, we report whether a control variable and each of the selfie behaviors are statistically significant (i.e., is not due to statistical chance). The index of the relationship is represented by a Beta ( $\beta$ ) coefficient, which can be negative (i.e., one variable is related to a decrease in the other) or positive (i.e., one variable is related to an increase in the other). A  $\beta$  near 0 means that there is no relationship between the variables; a  $\beta$  of around .10 is a small relationship, .30 is medium, and .50 is strong.

Overall, the model for RQ1 explained a statistically significant amount of variance in self-objectification,  $F(8, 206) = 16.28$ ,  $p < .001$ , Adjusted  $R^2 = .37$ . The only control variable associated with self-objectification was imaginary audience beliefs ( $\beta = .43$ ,  $p < .001$ ). Of the selfie variables, selfie editing ( $\beta = .21$ ,  $p = .001$ ) and selfie investment ( $\beta = .13$ ,  $p = .039$ ) were associated with self-objectification, but selfie frequency was not ( $\beta = .05$ ,  $p = .510$ ).

The model for RQ2 explained a significant amount of variance in appearance anxiety,  $F(8, 206) = 17.10$ ,  $p < .001$ , Adjusted  $R^2 = .39$ . In this model, adolescents' BMI ( $\beta = .19$ ,  $p = .001$ ) and imaginary audience beliefs ( $\beta = .34$ ,  $p < .001$ ) were positively associated with appearance anxiety. Similarly, selfie editing ( $\beta = .28$ ,  $p < .001$ ) and selfie investment ( $\beta = .22$ ,  $p < .001$ ) positively predicted appearance anxiety, but selfie frequency did not ( $\beta = -.13$ ,  $p = .089$ ).

The model for RQ3 explained a significant amount of variance in positive appearance evaluation,  $F(8, 206) = 6.02$ ,  $p < .001$ , Adjusted  $R^2 = .17$ . Of the control variables, only BMI was statistically significant, negatively predicting positive appearance evaluation ( $\beta = -.35$ ,  $p < .001$ ). Selfie investment negatively predicted positive appearance evaluation ( $\beta = -.24$ ,  $p = .001$ ). Neither selfie editing ( $\beta = -.06$ ,  $p = .444$ ) nor selfie posting ( $\beta = .11$ ,  $p = .224$ ) was related to positive appearance evaluation.

### Taking Stock of Selfies

The notion that selfies are tools of self-empowerment, at least in terms of body image, is challenged by these results. But an important caveat is that adolescent girls' approach to selfies matters. The frequency of posting selfies was unrelated to adolescents' body image outcomes. Rather, the *investment* in selfies and *editing* of selfies are the activities that have disempowering potential. Two patterns of findings support this contention. First, selfie investment was associated with all three body image variables, in the disempowering directions. Selfie investment was positively related to self-objectification and appearance anxiety, whereas selfie investment was negatively related to positive appearance evaluation. All three of these relations were statistically significant, but the size of the relations varied from small (self-objectification) to small-to-medium (appearance anxiety and positive appearance evaluation). Second, selfie editing was positively related to self-objectification and appearance anxiety. These were both medium-sized relationships. Thus, selfie investment and editing represent an approach to selfies that signals the acknowledgment that one's appearance is scrutinized by social media audiences. To the extent that adolescent girls apply these self-scrutinizing activities to their selfies, they are more likely to experience negative body image.

Girls who self-objectify tend to think of themselves as objects for others' consumption and evaluation (Fredrickson & Roberts, 1997). Selfies provide a salient way for adolescent girls to see (and control) how others see them. Thus, it makes sense that girls who self-objectify would take more pains to ensure that their selfies are appealing to others. Another premise of objectification theory is that girls are more likely to self-objectify than boys because their value and worth is more related to their appearance. Thus, investment in one's selfies can be seen as a way of protecting one's worth.

The results further suggested that girls who edit their selfies feel anxious about their appearance. If one were fearful of others' appearance evaluations, using selfie-editing tools to make the photos more appealing would be a reasonable way to deal with such an anxiety. Indeed, this finding is in line with research on eating disorders that has shown that body monitoring, which is essentially invited from others when one posts a selfie, is a maintaining factor for body dissatisfaction, a key indicator of eating disorder pathology (Shafraan, Fairburn, Robinson, & Lask, 2004). Girls who are preoccupied with how they look tend to become more vigilant and critical about their appearance, far from the empowerment that the Dove Self-Esteem Project would like consumers to believe (e.g., Simmons, 2013).

Finally, to test whether selfie activities were related to an empowering dimension of body image, we examined participants' positive appearance evaluation, one facet of body esteem. The results showed that being fastidious about choosing the perfect photo was actually associated with less positive appearance evaluation. Thus, it is possible that girls feel pressure to post selfies because they are a normative social media practice, but their time, attention, and worry about choosing the right one is indicative of feeling not great about their appearance.

Although our findings illustrate adolescents' experiences with the social media practice of selfies, we note that the study design does not allow us to make conclusions about the causal order between the variables. Posting selfies could result in adolescent girls' appearance anxiety, for example, as they receive and interpret feedback from their social networks on their appearance. Additionally, girls who are anxious about their appearance might use selfie-editing tools to make themselves appear appealing to others. In reality, the direction of influence probably goes both ways, in a reinforcing spiral (Slater, 2007), but further research is needed to sort out the causality.

Importantly, it is worth repeating that posting selfies is not harmful as an activity in and of itself. To be sure, selfies can be a fun way to document and share experiences with friends and family. However, peer approval and attention in the form of likes, follows, and comments can be intoxicating, especially in adolescence when imaginary audience ideation ramps up. For girls who are socialized to prioritize their appearance over most other characteristics, selfies can quickly turn into a platform of self-objectification. Obsessing about selfies and engaging self-scrutiny through selfie manipulation are practices that should be discouraged among adolescent girls. In the matter of selfies, it is not the frequency of posting, but rather an appearance-obsessive approach to posting selfies, that can backfire on adolescent girls' body image.

#### IT'S YOUR TURN: WHAT DO YOU THINK? WHAT WILL YOU FIND?

- Take a look at the promotional video, *Selfie* at [www.youtube.com/watch?v=BFkm1Hjg4dTI](https://www.youtube.com/watch?v=BFkm1Hjg4dTI). What do you like about it? What don't you like about it? What do you think of the video in light of our study's findings?
- Working in small groups, design a campaign on selfies and empowerment for young girls. What would you include in it and what would you avoid in light of this study's findings?
- Scroll through your social media feed. Compare the pictures (selfies in particular) posted by men and women. What differences do you see? How do these differences relate to the findings of this study?

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