



# How gender-stereotypical are selfies? A content analysis and comparison with magazine adverts



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## ABSTRACT

Selfies (self-portrait photographs often taken with a camera phone) are popularly used for self-presentation in social media like Facebook and Instagram. These modern user-generated self-portraits have the potential to draw a more versatile picture of the genders instead of reproducing traditional gender stereotypes often presented in mainstream media and advertising. To investigate the degree of gender stereotyping in selfies, a random sample of 500 selfies uploaded on Instagram (50% representing females, 50% males) was drawn and subjected to quantitative content analysis. The degree of gender stereotyping in the selfies was measured using Goffman's (1979) and Kang's (1997) gender display categories (e.g. feminine touch, lying posture, withdrawing gaze, sparse clothing) plus three social media-related categories (kissing pout, muscle presentation, faceless portrayal). Additionally, gender stereotyping in selfies was directly compared to the degree of gender stereotyping in magazine adverts measured in the same way (Döring & Pöschl, 2006). Results reveal that male and female Instagram users' selfies not only reflect traditional gender stereotypes, but are even more stereotypical than magazine adverts.

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## 1. Introduction

Selfies – self-portrait photographs, usually taken with a smartphone or webcam and shared via social media websites (Oxford Dictionaries, 2013) – are a modern form of self-presentation (Hunt, Lin, & Atkin, 2014). Selfies have become an important part of the visual communication in social media and are a growing trend. So-called *social media* (Carr & Hayes, 2015), e.g. social networking sites (SNS) like Facebook and photo sharing websites like Instagram – give everybody the opportunity to present themselves with their selfies to a wider Internet audience. There are many different types of self-presentation in selfies depending on the photographic angle and perspective, photo filters, situations etc. In public discourse more and more subgenres of selfies are pronounced: selfies taken while working out are referred

to as fitness-selfies (Fausing, 2013), welfies (work-out selfies; Oxford Dictionaries, 2013) or healthies (Bennett & Burke, 2014). Other word creations are the belfie (back side selfie), the prelfie (pregnant selfie, Bennett & Burke, 2014) and the drelfie (drunken selfie; Oxford Dictionaries, 2013).

The fact that selfies as user-generated content are a very popular new form of visual communication, that they are on public display via different types of social media and are subject of public debates make them a relevant topic of *research on human-computer interactions, communication and media research, media psychology*, as well as *gender research*. Selfies inevitably deal with gender expressions on two levels: the persons producing the selfies a) bring certain gender expressions with them (e.g. through their styling and attire) and they b) create gender expressions while taking the selfies (e.g. through choice of posture, facial expression or gaze in the photo). Focusing on gender expressions, the question arises how gender-stereotypical selfies are. For example, do females display themselves in selfies more often in postures suggesting weakness, subordination, and seduction (e.g. by lying down and/or making a kissing pout) and even self-objectification (de Vries & Peter, 2013) while males more often demonstrate their physical

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strength (e.g. by standing solidly and/or showing off their muscles)?

Gender stereotypes are ubiquitous in our culture as they – like other stereotypes – are cognitively useful: they help to simplify complex life experiences by categorizing (Taylor, Peplau, & Sears, 2003). Gender stereotypes are often strategically used in professionally produced media content (e.g. advertising) as well as in user-generated content (e.g. selfies) in order to create pictures and messages which are easy to decode and positively evaluated by the recipients (e.g. appreciation for representations of people that can be recognized as a typical and attractive female or male at first glance, Tortajada, Araña, & Martínez, 2013; Wu, Chang, & Yuan, 2015). Stereotypes, on the other hand, have the disadvantage that by drastically simplifying the social world they reproduce social norms and social hierarchies (Taylor et al., 2003). There is primary evidence that the style of a peer's profile picture on Facebook is imitated if the users think of it as attractive (Wu et al., 2015), which can further the reproduction of gender stereotypes. The use and overuse of gender stereotypes in visual communication is therefore met with criticism both in gender research and public debates (e.g. protests against gender-stereotypical adverts and products through campaigns like pinkstinks.org.uk).

Social media platforms with their user-generated content are intensely used by young people and therefore play a crucial role in their socialization (Subrahmanyam & Smahel, 2011) and identity development (Zarghooni, 2007), including gender identities. Selfies offer young people new opportunities of experimenting with both stereotypical and non-stereotypical gender representations. Investigating gender stereotyping in selfies is therefore especially relevant in the context of gender socialization of youth.

The goal of this study was to examine the extent to which visual gender stereotypes can be observed in selfies on Instagram. Furthermore, the degree of gender stereotyping in selfies was directly compared to gender stereotyping in magazine adverts.

## 2. Theory and state of research

### 2.1. Gender display in advertising

Advertising and media in general are a source of information and social learning (Taylor et al., 2003). Advertising can reflect values, beliefs, or norms and therefore affirm fundamental features of the social structure (Goffman, 1979; Kim & Lowry, 2005). Gender representations in specific give guidance and frame ideals of femininity and masculinity, of male and female attractiveness and gender-role behaviors (Myers & Biocca, 1992). For this reason, gender stereotypes in adverts were frequently studied over the past decades (Zotos & Tschla, 2014). Many scholars report that advertising reflects traditional gender stereotypes, thereby ignoring their actual diversity (Kim & Lowry, 2005). The most obvious gender differences common in advertising are the depicted characters' outward appearance. According to Nassif and Gunter (2008), women in television commercials are younger than male models. Furthermore, men and women still differ referring to their roles performed in adverts: female characters in the media seem to only have limited authority and often appear in assisting roles while men are more often in executive roles in TV commercials (Davis, 2003; Nassif & Gunter, 2008). The typical stereotypes of the mother and housewife and the man as breadwinner are still predominant. Women are more likely than men to be portrayed inside the home (Farris, 2014; Kaufman, 1999). In contrast to this, male advertising characters are more likely to be depicted in occupational settings than females (Davis, 2003; Nassif & Gunter, 2008).

Going beyond gender role stereotypes (Furnham & Mak, 1999),

the most commonly used conceptual framework of gender display in the media are the five categories defined by Erving Goffman (1979). According to these categories, females are stereotypically depicted as the weaker gender. The first category (1) *relative size* regards the gender difference in height and picture posing with women being predominantly depicted as smaller and in lower positions than men. Another prominent category is (2) the *feminine touch*. "Women, more than men, are pictured using their fingers and hands to trace the outlines of an object or to cradle it or to caress its surface" (Goffman, 1988, p. 29). This category furthermore involves self-touching (e.g. of one's own face or hair). The third category (3) *function ranking* denotes the depiction in traditional male roles and settings, with men having the executive role and women assisting them. (4) *Ritualization of subordination* is the tendency of women being located in lower positions in adverts than men in order to symbolise the men's higher social place and the subordination of women. Women are in particular more often portrayed lying down (*posture*) or canting their heads or body (*imbalance*). (5) The fifth category is *licensed withdrawal* stating that "women, more than men, appear to withdraw themselves from the social situation at hand" (Goffman, 1988, p. 68), firstly by *withdrawing their gaze* from the camera or closing their eyes, and secondly by depictions that suggest *loss of control* over emotions (showing for example expansive smiles, hiding behind objects).

Enhancing Goffman's categories, Kang (1997) added the category (6) *body display*. It denotes that in adverts women are "wearing revealing, hardly any, or no clothes at all, which is often associated with sexualized images of women" (Lindner, 2004).

Many social scientists used Goffman's (1979) categories to examine the depiction of the genders in advertisements and revealed that Goffman's categories mainly still prove their existence in adverts (Belknap & Leonard, 1991; Browne, 1998; Döring & Pöschl, 2006; Lindner, 2004) and other media such as music videos (Wallis, 2011).

Given that media and advertising not only reflect, but also provide guidance for gender roles, this can lead to distorted views. As cultivation theory suggests, exposure to media content creates a worldview or a specific portrait of reality (Gerbner & Gross, 1976; Kim & Lowry, 2005). Kim and Lowry (2005) state that, "as viewers see more and more images, they gradually come to cultivate or adopt attitudes and expectations about the world that coincide with the images they see" (p. 902). Therefore, distorted gender representations in advertising can shape how gender roles are seen in society.

### 2.2. Gender display in selfies

By the widespread use of smartphones with integrated high-resolution cameras, the extensive upload of selfies on social media websites is a recent phenomenon that is intensely used by adolescents (Subrahmanyam & Smahel, 2011). Online communities on the basis of social media websites (for example Instagram) play an important part in their identity development (Zarghooni, 2007). They provide young people with an opportunity for actively creating self-representations or a projection of their self socially and emotionally as real people (Garrison & Anderson, 2003). This allows for the creation of a social identity within the community. Such social identities provide "information about the social group, what is typical for that group and the expected norms it demands" (Caspi & Blau, 2008, p. 326). This works even for selfies that offer minimal social cues for interaction: Spears and Lea (1992) state that social cues exist as cognitive representations, even if they are missing in an interaction. Therefore, according to the authors, a feeling of belongingness to a group, or identification with a group,



Fig. 1. Feminine touch.

can still occur even if minimal social cues are provided in the environment. Against this background, online communities can be highly relevant for the socialization of youth (Subrahmanyam & Smahel, 2011).

Selfies as user-generated content provide the opportunity to experiment with various gender-related self-representations, be they stereotypical or non-stereotypical, and thereby are a chance to overcome traditional gender self-representation. To date, only a few studies exist that examine the self-presentation via selfies according to gender stereotypes. Although different cultural backgrounds serve as a predictor of gender role beliefs and gender-related behavior (van de Vijver, 2007), previous studies from various backgrounds found that pictures uploaded on social networking sites by adolescents replicate traditional gender stereotypes and ideals of beauty as they can be observed in advertising (Tortajada et al., 2013).

According to Tifferet and Vilnai-Yavetz (2014), males upload pictures to Facebook that accentuate their social status by using objects (e.g. cars) as well as formal clothing. In contrast, females' pictures accentuate emotional expression by eye contact and an extensive smile (Tifferet & Vilnai-Yavetz, 2014). In teen chatrooms, the gender stereotypes of female passivity and males' greater variety in actions and behaviors were found to be reflected: Kapidzic and Herring (2011) examined the gender differences in the profile pictures in chatrooms and found "girls presenting themselves seductively in posture, gaze, and clothing. In contrast, boys varied little in their dress, but adopted a greater range of behaviors in their profile photos, including presenting themselves as remote [...] and dominant [...]" (Kapidzic & Herring, 2011, p. 51). According to Tortajada et al. (2013), 40% of photos uploaded to the social media platform Fotolog for the self-presentation of boys and girls are highly sexualised: males show off in more active poses and accentuate physical strength, while the pictures uploaded by girls more frequently show them lying down and in passive and subordinated positions. The focus of females' pictures is on their attractiveness, beauty, and seductiveness. These pictures are more intimate as the protagonists reveal more naked skin (e.g., lower necklines) and are more often close-ups of parts of the body or face (Tortajada et al., 2013).

According to these studies, young Internet users tend to present themselves gender stereotypically in their selfies instead of



Fig. 2. Posture (lying).

creating alternative, stereotype-debunking or more gender-equal imagery.

While the state of research confirms gender stereotyping in both advertising and selfies up to now, studies that directly compare the extent of the use of stereotypical gender representations of men and women in professionally versus user-generated content are lacking. Further, to date Goffman's categories have been broadly used to analyze ads, but not selfies. Using those categories for professionally as well as user-generated media content provides a common theoretical framework for this comparison. This can help to shed a light on the question to which extent adolescent's photographic self-portraits resemble (and possibly imitate) advertising when it comes to gender expression.

### 3. Research questions and hypotheses

The aim of this study was to inspect the degree of gender stereotyping in Instagram selfies in comparison to magazine adverts in the tradition of Goffman's (1979) research on *gender display*. We addressed males' and females' selfies separately, as their gender beliefs and gender-related behavior likely differ (McHugh & Frieze, 1997) and different depictions for men and



Fig. 3. Imbalance.





Fig. 4. Withdrawing gaze.

women were widely found in previous studies. Gender roles (e.g. housewife or breadwinner) were not coded because most often selfies do not reveal much of the situational context. The photo sharing and social network platform *Instagram* was chosen because it is highly popular with adolescents (52% of youth aged 13 to 17 in the U.S. use *Instagram*, [Lenhart et al., 2015](#)), but up to now has not been expansively researched. As the majority of selfies in our sample showed only one person, the Goffman categories *relative size* and *function ranking* and the respective hypotheses were excluded from the analysis due to a low total number of depictions.

RQ1: To what degree do males' and females' selfies on *Instagram* reflect gender stereotypes based on [Goffman \(1979\)](#) and [Kang \(1997\)](#)?

H1.1: Females' selfies more often contain *feminine touch* than males' selfies.



Fig. 5. Loss of control.

H1.2: Females' selfies more often show *ritualization of subordination* than males' selfies.

H1.2.1: Females' selfies more often contain a *lying or sitting posture* than males' selfies.

H1.2.2: Females' selfies more often contain *imbalance* than males' selfies.

H1.3: Females' selfies more often show *licensed withdrawal* than males' selfies.

H1.3.1: Females' selfies more often contain *withdrawing gaze* than males' selfies.

H1.3.2: Females' selfies more often contain *loss of control* than males' selfies.

H1.4: Females' selfies more often show a higher degree of *body display* than males' selfies.

The second research question addresses gender-stereotyping in selfies that follow current social media trends.

RQ2: To what degree do males' and females' selfies on *Instagram* reflect social media specific gender stereotypes?

H2.1: Females' selfies more often contain a *kissing pout* than males' selfies.

H2.2: Males' selfies more often contain *muscle presentation* than females' selfies.

H2.3: Females' selfies more often contain *faceless portrayals* than males' selfies.

RQ3: Are gender stereotypes as defined by [Goffman \(1979\)](#) and [Kang \(1997\)](#) more or less salient in selfies compared to magazine ads?

For the third research question no one-sided a priori hypothesis can be stated: on the one hand we expect selfies being less gender-stereotypical than adverts, because they are informally produced by a broad spectrum of people with different gender identities. On the other hand, though, previous research points to



Fig. 6. Body display (sparse clothing).



Fig. 7. Kissing pout.

the reproduction of gender stereotypes in selfies and no direct comparison of gender display in selfies and adverts has been conducted so far.

## 4. Method

### 4.1. Sampling

A random sample of 250 selfies portraying females and 250 selfies portraying males was drawn in April 2014 from the photo sharing platform Instagram ( $N = 500$ ). Instagram is a platform used widely and internationally, but adding personal data to one's profile is not compulsory. Therefore, no information on the depicted persons' age, nationality, and cultural background can be reported. However, the random sample allows for generalization across different cultural backgrounds. Selfies were identified through the internationally used hashtags #selfie, #I, #me, #self and #myself. Every tenth picture displaying a male or female person was selected until the final sample size was reached.

The sample only contained selfies that were publicly available online; no private material or material from closed online communities was used. Neither the selfies nor the Instagram names of

the users who have published them are revealed, therefore the whole study and its results are completely anonymous.

In order to answer the third research question, we compared findings of a study on gender depictions in magazine ads (Döring & Pöschl, 2006) that also used Goffman's and Kang's gender depiction categories with the frequencies found for selfies in the presented study. For the magazine ad study a total of 183 print ads for mobile communication systems were drawn from popular German magazines from July 2001 to July 2003. All issues of the following magazines were collected: Focus, Der Spiegel, Stern (general readership magazines), Cosmopolitan, Amica (women's magazines), Men's Health, and FHM (men's magazines). One issue per magazine and month was collected by defining a key date for weekly magazines. Therefore, the sample included the same number of issues of each magazine – no matter whether weekly or monthly. As the study's aim was to analyze the portrayal of males and females, ads not depicting any person were excluded from the final sample resulting in 149 ads with 288 depicted persons (168 males (58.3%) and 120 females (41.7%); Döring & Pöschl, 2006; p. 176).

### 4.2. Measurement of variables

The selfie sample was subjected to quantitative content analysis. Ten variables were measured in the content analysis:

- one category for the sex of selfie producer: male or female
- six categories for gender-stereotyping based on Goffman (1979) and Kang (1997): *feminine touch*, *ritualization of subordination* (measured with two indicators: *posture* and *imbalance*), *licensed withdrawal* (measured with two indicators: *withdrawing gaze* and *loss of control*), and *body display* (see Figs. 1–6).
- Three categories for social media related gender-stereotyping: *kissing pout*, *muscle presentation*, and *faceless portrayal* (see Figs. 7–9).



Fig. 8. Muscle presentation.



Fig. 9. Faceless portrayal.

The selfies depicted in Figs. 1–9 are re-enactments of typical selfies in the sample. These figures serve to illustrate the coded categories visually. Original Instagram selfies were not used to ensure anonymity. All protagonists of the re-enacted selfies gave their permission to use the pictures for this article.

#### 4.2.1. Goffman's and Kang's categories for gender-stereotyping

*Feminine touch* encoded whether or not the persons are touching themselves (e.g., their face or hair), their clothes or whether they are using their hands tracing an object (Fig. 1).

*Ritualization of subordination* was measured by two variables: *posture* and *imbalance*. The *posture* of the depicted person's body was coded as standing, sitting or lying (Fig. 2).

*Imbalance* encoded whether or not the person's position showed signs of disequilibrium, such as canting the head or body, standing on one foot, crossing legs, or leaning onto others for support (Fig. 3).

For coding *licensed withdrawal* again two categories were taken into account: depictions of people withdrawing their gaze from a situation by closing their eyes or looking in a different direction than the camera is among the category *withdrawing gaze* (Fig. 4).

The second category of licensed withdrawal is *loss of control* over one's emotions (Fig. 5). Portrayals showing expansive smile or loud laughter as well as covering one's face or mouth or biting fingers are coded here.

The category *body display* (Kang, 1997) rated whether the person depicted on the selfies is wearing complete clothing or sparse clothing (Fig. 6).

#### 4.2.2. New social media-related categories for gender-stereotyping

Based on the state of research and public discourses about selfies on social media, three additional categories were measured: the category *kissing pout* (Fig. 7) was coded if the person made a kissing pout.

The category *muscle presentation* (Fig. 8) was coded if the person posed to show off muscles.

The category *faceless portrayal* (Fig. 9) was coded if the selfie did not reveal the face.

#### 4.3. Inter-coder reliability

Inter-coder reliability was computed separately for both studies. For the selfie study, 20 selfies were randomly selected from the data pool and coded independently by two coders, revealing high inter-coder reliability. The Cohen's Kappa values for all ten binary categories are presented in Table 1.

**Table 1**  
Coding variables and inter-coder reliability (Cohen's Kappa).

Category	Cohen's Kappa
Sex of selfie producer	1.00
Gender-stereotyping (Goffman and Kang)	
Feminine touch	.79
Ritualization of subordination	
Posture	1.00
Imbalance	.90
Licensed withdrawal	
Withdrawing gaze	1.00
Loss of control	1.00
Body display	
Sparse clothing	.73
Full clothing	.73
Gender-stereotyping (social media-related)	
Kissing pout	1.00
Muscle presentation	1.00
Faceless portrayal	1.00

Note. 20 selfies were coded by 2 independent coders.

For the magazine ad study, 27 randomly selected ads from the data pool were coded independently by two coders. Cohen's Kappa values ranged from .44 for withdrawing gaze to .93 for sex, with an average Kappa of .76 (Döring & Pöschl, 2006, p. 177).

#### 4.4. Data analysis

For the descriptive analysis of the data, the percentages of each binary variable were computed and interpreted. To test the hypotheses regarding statistically significant differences between females' and males' selfies (RQ1 and RQ2), chi square tests were conducted using SPSS 21.

In order to answer the third research question, we compared the descriptive statistics (frequencies) of Goffman's and Kang's categories of the selfie study to the ones found in the magazine ad study.

### 5. Results

#### 5.1. Gender stereotyping in selfies according to Goffman's and Kang's categories

As predicted by the one sided hypotheses related to the first research question, statistically significant gender differences with small to medium effect sizes were found in selfies for all of Goffman's and Kang's categories with the *sitting posture* being the only exception (see Table 2). The biggest gender effects were found for the categories *feminine touch* and *imbalance*.

**Table 2**  
Gender differences in selfies on Instagram based on Goffman's categories.

Goffman's category	Total (%)	N	Females (%)	Males (%)	$\chi^2$	p	w
Feminine touch	15.8	79	84.8	15.2	45.8	<.001	.30
Ritualization of Subordination							
Posture	72.8	364					
Standing	49.2	246	46.7	53.3	5.0	.02	.12
Sitting	13.4	67	53.7	46.3	.28	.35	.03
Lying	10.2	51	66.7	33.3	6.0	.01	.13
Imbalance	18.2	91	85.7	14.3	57.1	<.001	.34
Licensed withdrawal	18.8	94					
Withdrawing gaze	11.0	55	61.8	38.2	3.6	.04	.08
Loss of control	7.8	39	79.5	20.5	14.9	<.001	.17
Body display	98.4	492					
Sparse clothing	13.8	69	59.4	40.6	3.4	.04	.08
Full clothing	84.6	423	47.5	52.5	3.4	.04	.08

Note. Under the total sample, the percentages describe the percentages of all selfies analyzed. The percentages of men and women signify the distribution of sexes in each category by Goffman. One-tailed significances are given for  $\chi^2$ -values.  $df = 1$ .

#### 5.2. Gender stereotyping in selfies according to new social media-related categories

As predicted by the one-sided hypotheses related to the second research question, statistically significantly more selfies produced

**Table 3**  
Gender differences in selfies on Instagram based on social media-related categories.

Social media-related category	Total (%)	n	Females (%)	Males (%)	$\chi^2$	p	w
Kissing pout	7.0	35	82.9	17.1	16.4	<.001	.18
Muscle presentation	3.0	15	0	100	15.4	<.001	.18
Faceless portrayal	3.8	19	73.7	26.3	4.5	.03	.10

Note. Under the total sample, the percentages describe the percentages of all selfies analyzed. The percentages of men and women signify the distribution of sexes in the additional categories. One-tailed significances are given for  $\chi^2$ -values.  $df = 1$ .



by females were found to fit the categories the *kissing pout* and *faceless portrayal*, whilst males' selfies more often displayed *muscle presentation* (see Table 3). The biggest gender differences were found for the *kissing pout* and *muscle presentation*.

### 5.3. Gender stereotyping in selfies versus magazine adverts

To answer the third research question, the selfie sample was compared to a sample of magazine adverts that was analyzed in the same way using Goffman's categories (Döring & Pöschl, 2006): Table 4 shows that the selfies were more gender-stereotypical than the magazine adverts in four out of six categories: *feminine touch*, *imbalance*, *withdrawing gaze* and *loss of control*. The biggest differences between selfies and magazine adverts appeared for the categories *imbalance* (85.6% of females in selfies versus 58.6% of females in adverts were not standing stable) and *loss of control* (79.5% of females in selfies versus 50.0% of females in adverts showed strong emotionality; see Table 4).

Only in two of the six categories the magazine adverts revealed more gender-stereotyping: 77.8% of the adverts depicted women in a *lying position* as opposed to 66.7% of the selfies, and in 79.5% of the magazine adverts women were *sparsely clothed* as opposed to 59.4% of the selfies.

**Table 4**

Comparisons of gender stereotyping in selfies on Instagram ( $N = 500$ ) and mobile phone adverts in magazines (Döring & Pöschl, 2006;  $N = 288$ ) based on Goffman's categories.

Goffman's category	Selfies		Adverts		Total (%)	
	Females (%)	Males (%)	Females (%)	Males (%)	Selfies	Adverts
Feminine touch	84.8	15.2	69.4	30.6	15.8	18.1
Ritualization of Subordination						
Posture						
Standing	46.7	53.3	49.6	50.4	49.2	53.9
Sitting	53.7	46.3	31.0	69.0	13.4	38.2
Lying	66.7	33.3	77.8	22.2	10.2	7.9
Imbalance	85.7	14.3	58.6	41.4	18.2	49.6
Licensed withdrawal						
Withdrawing gaze	61.8	38.2	49.3	50.7	11.1	51.5
Loss of control	79.5	20.5	50.0	50.0	7.9	43.4
Body display						
Sparse clothing	59.4	40.6	79.5	20.5	14.0	37.8
Full clothing	47.5	52.5	23.2	76.8	84.0	60.9

Note. Under total sample, the percentages describe the percentages of all pictures analyzed in the studies. The percentages of men and women signify the distribution of sexes in each category. Table 4 partly recapitulates information presented in Table 2 in order to directly compare results from the magazine ad study and the selfie study.

## 6. Discussion and concluding remarks

The study revealed that Instagram selfies reproduce traditional gender stereotypes and do so even to a larger extent than magazine adverts. Selfies produced and published by young females more often use visual codes of subordination defined by Goffman (1979) and Kang (1997): *feminine touch*, *lying posture*, *imbalance*, *withdrawing gaze*, *loss of control*, and *body display*. Additionally, young females' selfies more often use social-media-specific gender expressions like the *kissing pout* implying seduction/sexualisation and the *faceless portrayal* (implying focus on the body solely), while young males' selfies more often contain *muscle presentation* (implying strength). All gender effects were statistically significant with small to medium effect sizes. Comparing the degree of gender

stereotyping in selfies with magazine adverts, the selfies turned out to be even more stereotypical than the adverts in four of six categories (*feminine touch*, *imbalance*, *withdrawing gaze*, *loss of control*), while ads were more stereotypical than selfies in two categories (*lying posture* and *body display*).

User-generated content obviously does not automatically lead to a reduction in stereotypical gender portrayal as was clearly demonstrated by the presented content analysis of Instagram selfies. Why is that the case? Gender stereotypes observed in mass media might be adopted by media users (as predicted by cultivation theory) and might be imitated or even exaggerated by young people in their selfies on Instagram and other social media sites. In addition to the influence of advertising and other mass media content on adolescents' selfie production, Instagram users' self-socialization needs to be taken into consideration: Existing gender stereotypical Instagram selfies might be imitated by other Instagram selfie producers. However, further research is necessary to test these causal explanations.

Some limitations of the study need to be addressed. The presented content analysis in the tradition of Goffman (1979) and Kang (1997) covered a *limited amount of variables* related to gender stereotyping; further studies could cover a broader spectrum of categories (e.g. including styling, type of clothing). A content analysis by definition focuses on attributes of the media content itself and does not provide information about the *content creators* and the *creation processes* nor about the *content users*, the *reception/appropriation processes* and *subsequent effects*. Therefore, further studies are needed to explore why and how some male and female selfie producers create or not create their selfies in certain gender-stereotypical ways (e.g. to which degree is gender expression in selfies spontaneous or strategically planned?) Another open question is how the selfie audiences perceive and evaluate those gender representations (e.g. where is the line between gender role conformity that is appreciated among young people of different cultures and milieus, and gender stereotyping that is perceived as inauthentic, staged, ridiculous or “cheap”?) The use of the kissing pout in females' selfies has been established, but at the same time it is ironically labeled as “duck face” among youths indicating critical distance towards certain visual gender stereotypes.

Questions related to the creation and perception of more or less gender-stereotypical self-imagery are not only relevant for research but also for media education and should be discussed in detail with different groups of young social media users as part of promoting social media literacy.

Last, but not least, it needs to be noted that by sampling Instagram selfies with general hashtags like “selfie” or “me” we focused on *mainstream imagery*. To specifically explore selfies that digress from traditional gender expressions and gender stereotypes it is necessary to pick created images - for example, by people from gender and sexual minorities or people with a feminist background. Those selfies can be found on social media with hashtags like #queerselfie, #transselfie or #feministselfie. Today, we don't know to what degree and under which circumstances the production and publication of gender-alternative selfies can empower their creators via positive feedback or disempower them via online hate. Also, we don't know if and how gender-alternative selfies will influence mainstream visual culture with its ubiquitous gender stereotypes.

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