



Race, gender, and self-presentation in teen profile photographs

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Abstract

This study analyzes how teens represent themselves through their profile photographs on a popular anonymous chat site. Using visual content analysis methods, we analyzed 400 profile photographs, controlling for the self-reported gender and the apparent race of the photographic subject. The analysis finds significant differences in gaze, posture, dress, and distance from the camera according to gender and race, although racial differences are stronger for boys than for girls. To a surprising extent, the findings mirror previous findings of gender and race differences in face-to-face interaction, suggesting that the teens construe their profile images as invitations to interact with others online. At the same time, their photo choices reproduce culturally dominant ideologies of gender and race as reinforced by mass media images.

Keywords

Dress, gaze, gender, interpersonal distance, photographs, race, self-presentation, sexualization, teenagers

Introduction

The technological means to represent one's persona online have become progressively richer since the early days of computer-mediated communication. In text-only

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environments such as the chat rooms and MUDs¹ popular in the early 1990s, individuals were limited to constructing self-representations through user names and textual descriptions (Danet, 1998; Nakamura, 1995). In the graphical chat environments that followed, users were represented by cartoon-like avatars (Nakamura, 2002). In recent years, however, the combination of increased bandwidth and the rise in popularity of social network sites (SNS) has resulted in many internet users posting photographs of themselves, which show them, in principle, “as they really are”. Accompanying this is a trend for people to use their real names online and to make their personal information openly accessible. This evolution represents a shift from (relative) anonymity towards “nonymity” (in the term of Zhao et al., 2008) as regards online self-presentation.

The choice of one’s profile photograph is not self-evident, however. In the present era of webcams and digital photography, a social media user has available a nearly infinite number of potential photos from which to choose – one can take multiple pictures to capture just the right effect, and photographs can be modified. Nor is the choice trivial: other users judge the attractiveness and the personality characteristics of profile owners based on how they present themselves through photographs (Walther et al., 2008).

Photograph choice is under the control of the user and, like other aspects of impression management, it is typically intended to enhance the user’s positive self-presentation (Walther et al., 2001). Photographic choices can also have unintended negative consequences. Young girls are increasingly preoccupied with looking sexy in their online profiles (Willem et al., 2012), which may attract online predators (Kornblum, 2006) and/or affect their future employment opportunities (Bruzzese, 2012). Sexualized self-presentation online can be traced to the ubiquity of web pornography, leading young people to “self-commodify” (Paasonen, 2011) in often stereotypical ways.²

Just as gender has become more visible with photographic self-presentation, so, too, has race; both have social and physiological correlates. However, while some scholarship has compared the online profile pictures of males and females, race in relation to photographic self-representation online has received little attention to date. One possible reason for this is the controversy surrounding discussions of race in the western world, particularly as regards the classification of individuals into different racial categories, which some scholars view as essentializing (Prentice and Miller, 2007). Nonetheless, as Grasmuck et al. (2009) observe, “it is reasonable to expect that race will become a more salient factor in nonymous and semiembodied online settings than in anonymous and disembodied online settings” (p. 161).

Adolescence is a crucial period in the formation and diffusion of identity (Erikson, 1968), including gender identity. Moreover, ethno-racial sensibilities are heightened during adolescence, especially for minority youth (Grasmuck et al., 2009). Both race and gender have been found to influence self-presentation in face-to-face (f2f) encounters, sometimes interacting in complex ways (e.g., Bauer, 1973; LaFrance and Mayo, 1976; Simpson et al., 1996), and gender has been found to influence teenagers’ online profile photograph choices (Kapidzic and Herring, 2011). What is unknown is the extent to which ethnic and racial minority youth post racialized self-presentations through their choice of photographs, and whether, and if so how, this reflects their gender. This is important to study, because race/ethnicity and gender may shape online behavior in different ways and to different extents. To begin to address these issues, the present study

systematically compares the contributions of race and gender to photographic self-presentations on a popular teen chat site.

In photo-realistic images, the subject matter can be manipulated in subtle ways, e.g., through variations in dress, posture, and engagement with or distance from the camera. In this study, we analyze user profile photographs on a site where realistic photographic self-representation (rather than cartoonish images) is the norm. The study employs visual content analysis methods originally developed for the analysis of photographs in offline contexts. Race and gender were operationalized and categorized (as black/white and female/male) in terms of features of the photographic subject's appearance. The analysis reveals that girls show themselves at a closer distance, more seductively posed, and more revealingly dressed – in short, as more sexually available – than boys. Moreover, whites are more seductively posed and more revealingly dressed than blacks overall. However, whereas the poses of white and black girls are similarly seductive, white boys pose more seductively and show more skin than black boys, while black boys pose in dominant postures more often than white boys.

Despite the common perception that online spaces are environments where self-presentation is creatively modifiable, free from the limitations imposed in f2f interaction by time, space, and physicality, our findings largely mirror previous findings of gender and race differences in f2f behavior and interpersonal distance. They further suggest that f2f norms of interpersonal interaction apply to social media profiles, even though in the latter case static images, rather than dynamic behaviors, are involved. The teens manipulate, through image choice, their posture and gaze, dress, and distance from the viewer – all signals available in offline physical interaction; in the process, they unconsciously reproduce offline ideologies of gender and race. We trace the patterns evident in these manipulations to culturally dominant norms of attractiveness as reinforced by mass media images.

Background

Self-presentation is centrally involved in impression management and the projection of an online identity (Walther, 1996). Impression management has been studied especially for online dating sites, where positive impressions are crucial to attracting desirable mates. For example, Whitty (2008) found that dating site users tended to choose images strategically in order to appear more physically attractive; this was especially the case for female users, who often chose “glamour shots” for their profile pictures.

On social media sites, as well, most users report choosing profile pictures on the basis of whether they think they look good in them, and girls and women place more emphasis than boys and men on displaying physical attractiveness (Manago et al., 2008; Siibak, 2009). Manago et al. (2008) argue that the young women in their study of MySpace felt pressured to present themselves in a sexualized way (e.g., via suggestive clothing, flirtatious gaze) by offline gender scripts of the physically attractive woman. At the same time, the authors point to a growing trend for young male MySpace users to present themselves as attractive and sexual, for example by showing their nude upper body.

The findings of these self-report studies are consistent with those of studies that analyzed actual profile pictures. In a content analysis of profile pictures posted in teenage

chatrooms, Kapidzic and Herring (2011) found that most girls' pictures presented them looking up or sideways at the viewer and in suggestive dress (e.g., showing cleavage). Boys' choices were more varied, but they had a tendency to choose pictures that showed them at a greater distance and with their eyes averted from the camera. Siibak (2010) analyzed the profile pictures of teenage boys on a popular Estonian social network; the majority of boys posted pictures in which they were alone and posing. The authors of both studies concluded that traditional gender stereotypes of behavior and presentation (e.g., women as sexually available, men as emotionally distant) persisted in online environments, and that the teens were imitating mass media models in an attempt to appear attractive. In support of this interpretation, Kapidzic (2011) found a correlation between the internalization of media ideals and the types of images selected as profile photos by young men and women on Facebook: young people who strongly internalized ideals of appearance from the media chose images in which they were wearing less and posing seductively more often than those who did not.

Few studies have investigated racial presentation online in terms of physical appearance. In an early study of a social MUD in which users described their character's appearance textually, Nakamura (1995) identified the practice of "racial tourism", or adopting an online persona of a different, "exotic" race as a vacation from a fixed identity and the offline self. In her study, the adopted characters represented sexually attractive Asian stereotypes (e.g., geisha girls, Samurai swordsmen); however, they were animated by Caucasians. More directly relevant to the present study, Hall et al. (2012) studied profile photograph choices on MySpace, and found that black and Hispanic women self-sexualized more than white women in terms of body display and objectification, and that self-sexualization was greatest among 18–25-year-olds.

A number of studies have compared SNS usage by race. Duggan and Brenner (2013) reported that whites and African Americans were using SNS in similar proportions in late 2012; however, African Americans used Twitter and Instagram significantly more often, while white users gravitated towards Pinterest. Moreover, teenage users differed in respect to how much personal information they shared: white teens disclosed their full name and relationship status more often than African Americans did (Madden et al., 2013). Yet African Americans, Latinos, and East Indians posted more photographs and status updates, and in general invested more intensely in the production of their online identity, than white users on Facebook, leading Grasmuck et al. (2009) to conclude that "ethno-racial identities [on Facebook] are salient and highly elaborated" (p. 158).

The literature surveyed above is problematic in two respects. First, conceptually, "attractiveness" is not analyzed as potentially variable, even in studies that analyze profile photos and conclude that the primary motivator for photo choice is a desire to appear attractive; rather, it is usually assumed to involve sexual attractiveness, and sexual attractiveness is assumed to involve (partial) nudity (cf. Durham, 2008). Second, little research has addressed race in profile photos; the one study that has (Hall et al., 2012) only considered sexualized self-portrayals and did not analyze the profile photos of men.

In this study we ask whether there are differences according to user race and gender for photographs chosen for self-presentation on a teen chat site. In analyzing these photographs, we draw on Goffman's ideas on the presentation of self, according to which

every interaction is a performance. Goffman (1959) proposed that individuals utilize two different kinds of “sign activity” in their self-presentation: “given” and “given off” cues. “Given” cues constitute communication in the narrow sense of a verbal exchange, whereas “given off” cues are non-verbal and include gestures, facial expressions, and other forms of non-verbal expression.

Online spaces provide individuals with the opportunity to manage visual and textual cues without the immediacy of reactions present in f2f communication; thus internet users can optimize their performance more than when interacting f2f (Walther, 1996). However, although the internet is often seen as a space for personal reinvention, free from the constraints of offline norms of interaction and identity, research has repeatedly found that such norms carry over into online environments and shape self-presentation (e.g., Kapidzic and Herring, 2011; Manago et al., 2008). In this process, user selection of profile pictures may be influenced, consciously or unconsciously, by factors associated with offline pictorial representations or f2f interactions. These factors can be analyzed systematically using methods of visual content analysis.

One such factor is *distance*. In studies of visual presentation, the distance of the person in the image from the camera influences the perception of the image (Kress and Van Leeuwen, 1996). Individuals who are shown in close-up shots are perceived as being more intimately acquainted with the viewer. Individuals whose figure is fully visible, in contrast, may be perceived as not only physically but also emotionally distant. In keeping with Goffman’s insights, individuals may select images for self-presentation based on the level of intimacy they wish to convey to their perceived audience.

Only a few studies have analyzed distance in online settings. Yee et al. (2007) experimentally explored gender and interpersonal distance in Second Life, a virtual environment in which users are represented by graphical avatars, and found that avatar distance was significantly greater in male–male than in female–female dyads, reflecting offline gender differences in proxemics. Similarly, in their analysis of distance in teenagers’ profile images, Kapidzic and Herring (2011) found that female teens posted significantly more images at closer distances, whereas male teens tended to post images showing themselves further away. The interaction of race and distance has not been studied in online environments, although race differences in interpersonal distance have been found in f2f interaction. A study by Aiello and Jones (1971), for example, found that white children stood further apart than black children during conversational interactions. Bauer (1973) found that in dyadic interactions with strangers, white men maintained the greatest distance, whereas black women stood closest to their interlocutor.

Profile photo selection may also be influenced by the *behavior* displayed by the person in the picture. In a study of the representations of men and women in magazine advertisements, Goffman (1979) observed differences in the gaze and posture of the models. He found that female models were often portrayed gazing up at the viewer out of the corner of their eyes, in a seductive manner. The idea that gaze and head position could influence the way in which an individual in an image is perceived by the viewer was developed further by Kress and Van Leeuwen (1996), who suggested that a person is perceived as “demanding” or “offering” something to the viewer based on the direction of his or her gaze (e.g., looking down at the viewer suggests a demand). Building on

these observations, Bell (2001) distinguished four types of behavior: offer, submission, seduction, and affiliation. Thus, people may select images for self-presentation out of a desire to suggest a certain role (e.g., friend, possible romantic partner) to their perceived audience.

In Kapidzic and Herring's (2011) analysis of teen profile photographs, girls favored "seductive" behavior, whereas boys tended to select pictures in which they did not look directly into the camera or in which they seemed to be seeking either a dominant or a friendly relationship with the viewer. These patterns mirror gender differences in f2f communicative behavior (e.g., Simpson et al., 1996). Although no similar study has been conducted regarding race in online environments, a study of race and gaze in f2f communication (LaFrance and Mayo, 1976) found that when engaged in conversation, black male dyads looked at each other significantly less than did all combinations of white dyads. Furthermore, female black dyads looked at each other less than white female dyads.

A third factor that internet users may consider when selecting profile photos is degree of (un)dress. Several studies point to a trend for female users, especially, to select images for self-presentation in which they are wearing suggestive clothing (e.g., Hall et al., 2012; Kapidzic and Herring, 2011). Kapidzic and Herring (2011) applied a classification scheme devised by Soley and Reid (1988) for magazine advertisements to code the amount of clothing teens were wearing in their online profile images, ranging from demure (fully clothed) to nude (no clothing visible), and found that teen girls more than teen boys selected pictures in which their clothing was revealing. As regards race, Hall et al. (2012) found that black women displayed more of their body in their MySpace photographs than did white women; however, no comparable study of the dress of black and white men exists.

The above literature review suggests that distance, behavior, and dress are potentially important variables to consider when analyzing profile pictures. Research has found gender differences in online visual self-presentation, although less is known about race-based differences in online images. Given the unevenness of research in this area, and in order to facilitate systematic comparison across the two demographic variables, the first two research questions ask:

RQ1: What differences, if any, are there in distance, behavior, and dress in the profile pictures that male teens and female teens post for self-presentation?

RQ2: What differences, if any, are there in distance, behavior, and dress in the profile pictures that black teens and white teens post for self-presentation?

Moreover, studies of physical proximity and gaze in f2f environments have found gender and race to interact. For example, men and blacks both tend to avoid direct eye gaze, but black males avoid it more than do whites of either gender, whereas white women make direct eye contact more than do blacks of either gender (LaFrance and Mayo, 1976). Thus, we ask:

RQ3: What interactions, if any, are there between race and gender as regards distance, behavior, and dress in the profile pictures posted for self-presentation?

Data

The images analyzed in this study come from a popular chat site designed for and used by teens. As part of a larger trend towards online media convergence, chat sites have been incorporating features such as the possibility to create a profile and upload images. An advantage of chat sites as data sources is that most are publicly accessible, in contrast to SNS such as Facebook, which are more difficult to access and study due to privacy restrictions.

After compiling a list of English-language teen chat sites, we selected the most popular chat site containing user profile images for analysis. Site popularity was defined as frequency of use (individual visits per month) and identified using the website rank page www.quantcast.com. At the time of our data collection, the site chosen for analysis was receiving more than 250,000 visits per month.

The main purpose of the chosen site is to provide teens a forum in which to chat and meet others. The users' profile pictures are not visible in their chat communication: other users only see their user IDs, as in traditional multi-participant webchat. However, profiles can be consulted on the site; they provide information about age, interests, and physical appearance to those who want to seek further contact, e.g., via private chat. Thus profile pictures may serve as "promotional material" on the site. Unlike on SNS such as Facebook, users cannot comment on each other's pictures or tag each other; only the users themselves shape their visual presentation.

The site chosen for this study has a search feature that randomly selects user profiles according to specified search criteria. Two searches were conducted in early 2010, one for female and one for male users between the ages of 16 and 19, and the first 100 profile images from each search were taken as the sample for analysis.³ The same process was repeated early in 2011. The final sample consisted of 400 profile images (200 male, 200 female).

Methods

The profile images were first coded for whether or not they contained a photograph, and those with photographs were further coded for the demographic variable of race, as well as for three visual content variables established in previous studies.

Gender

All images were coded for gender. Results from the search that selected females were coded as females, and results from the search that selected males were coded as males.⁴ The search results are based on the gender that users self-select when setting up their profile.

Race

All images of people were coded for apparent race on the basis of physical features such as skin color and facial features. Race was coded as: (a) *black*, (b) *white*, and (c) *other*,

where *other* includes persons whose race could not be identified clearly. Similar coding schemes have been used in studies of models in magazine advertisements (Frith et al., 2005) and television news (Dixon and Linz, 2000).

Distance

All photographs were coded for distance. We modified the coding scheme proposed by Kress and Van Leeuwen (1996) to code the distance of the account holder as: (a) *close*, (b) *intermediate*, and (c) *far*.

Behavior

The photographs were coded for the variable behavior. Bell (2001) defined the values of this variable as: (a) *offer/ideal* (looking away), (b) *demand/affiliation* (looking straight at the camera), (c) *demand/submission* (looking down at the camera), and (d) *demand/seduction* (looking sideways at the camera or with head tilted). To these, Kapidzic and Herring (2011) added the value (e) *other* for cases in which the behavior did not fit the established categories.⁵ This adaptation was used in the present study.

Dress

Last, all photographs were coded for dress. Using an adaptation of Soley and Reid's (1988) scale, we coded images of the account holder as: (a) *fully dressed*, (b) *revealingly dressed* (showing cleavage, upper thighs, or stomach), (c) *partially dressed* (wearing swimsuit, males with bare chest, or no clothing visible), and (d) *not applicable* (only head visible).

The data were coded by two coders. To assess inter-rater agreement, 50% of the pictures (100 male and 100 female) were coded by both authors. Satisfactory agreement was reached in coding for race at 84%. Our initial coding scheme included Asian and Hispanic codes, but these were subsumed under the category *other* because inter-coder reliability was low. Intercoder reliability was much higher for *white* (98%) and *black* (77%). All individuals whose apparent race could not be identified as black or white were coded as *other* for race. Inter-rater agreement was also satisfactory for the three content analytic variables: distance 83%, dress 94%, and behavior 84%. All coding disagreements were resolved through discussion, and the remaining images were coded by the first author.

Results

Descriptive statistics

Only 31 (7.7%) of the 400 users had no profile photograph. Four male profiles had a graphical avatar, one had an image of an object, one had a drawing of an alien, and 14 had the default image provided by the site (an outline of a generic human head). Four female users had cartoon avatars, one had an image that was unidentifiable, and six had the default profile image. Overall, 10% of male profiles did not have a photograph, as compared to 5.5% of female profiles.⁶

Table 1. Distance (percentages within gender and race).

Distance	Total (n= 319)	Female (n=163)	Male (n = 156)	White (n=251)	Black (n = 68)
Close	48.3%	53.4%	42.9%	47.8%	50.0%
Intermediate	41.1%	34.4% _a	48.1% _b	41.4%	39.7%
Far	10.7%	12.3%	9.0%	10.8%	10.3%

Note: Subscripts _{a,b} indicate significant differences between members of the pair.

The race coding showed that the majority of participants with profile photographs were white (68%). Black participants made up 18% of the sample,⁷ and participants whose race could not be identified clearly (*other*) accounted for 14% of the total sample. The gender ratio was similar for each race.⁸ Participants in the *other* category were excluded from further analysis. The final sample consisted of 319 photographs; whites comprised 79% of the sample and blacks 21%. Females made up 51% of the sample: 50% of white teens and 54% of black teens.

Distance

Analysis of distance in the profile pictures showed that individuals most commonly chose pictures in which their head and shoulders were visible (Table 1). Conversely, images in which the full figure was visible were chosen infrequently. To address the first research question regarding how female and male teens portray distance in their profile pictures, the values were scaled from 1 (close) to 3 (far) and analyzed using a nonparametric Mann Whitney test. The results show no overall gender differences in the distance selected in profile pictures ($z = -1.30, p = .19$), although there were marginally significant differences in the selection of pictures in which the head and shoulders were visible, which were chosen more frequently by girls, and pictures at an intermediate distance, which were preferred by boys (see Table 1). Statistical analysis revealed no differences in the distances selected by blacks and whites ($z = -.31, p = .76$).

To address the question of whether gender and race interact in the distance portrayed in profile pictures, Mann Whitney tests were run for each race and each gender separately. Although there are differences in the individual distances portrayed in the pictures of black males and females, and significant differences between white males and females – in both cases males tend to select an intermediate distance more often than females (see Appendix 1) – the tests did not reveal any significant differences in the overall distance selected by black boys and girls ($z = -.07, p = .95$) and white boys and girls ($z = -1.49, p = .14$). Similar selection preferences occur in both subgroups (although they are more pronounced for whites), suggesting that there is no interaction between race and gender for the distance depicted in the photographs.

Behavior

The behavior analysis revealed strong gender differences. To allow for a more detailed analysis, behavior was recoded into dummy variables for each value. Independent

Table 2. Behavior (percentages normalized by race and gender).

Behavior	Total (<i>n</i> = 319)	Female (<i>n</i> = 163)	Male (<i>n</i> = 156)	<i>t</i> -test	White (<i>n</i> = 251)	Black (<i>n</i> = 68)	<i>t</i> -test
Affiliation	8.8%	4.9%	12.8%	-2.49*	8.8%	8.8%	-.02
Seduction	51.7%	73.0%	29.5%	8.61***	55.0%	39.7%	2.25*
Submission	10.3%	1.2%	19.9%	-5.62***	9.2%	14.7%	-1.18
Offer	27.0%	19.0%	35.3%	-3.30**	24.7%	35.3%	-1.64
Other	2.2%	1.8%	2.6%	-.44	2.4%	1.5%	.36

Note: * $p < .05$, ** $p < .01$, *** $p < .001$.

sample *t*-tests were conducted for each variable, and significant gender differences were found across all behavior types. Male teens posted images in which they were looking straight into the camera, looking down, and looking away from the camera significantly more often than female teens. In contrast, girls posted pictures in which they displayed seductive behavior significantly more than boys. Moreover, white teens posted pictures in which they displayed seductive behavior significantly more than black teens (see Table 2).

In order to address the question of whether gender and race interacted in the type of behavior selected in profile pictures, independent sample *t*-tests were run for each race and each gender separately. The analyses revealed that white teens differed significantly by gender in the choice of all behavior types, whereas black teens differed only in the choice of seduction and submission behavior (see Appendix 2). Furthermore, white and black girls showed no statistically significant differences in behavior, although there was a tendency for white girls to display seductive behavior more often, while black girls tended to select pictures in which they were looking away, consistent with the overall patterns for each race. Boys, however, differed significantly in seductive behavior ($t(56) = 2.10, p = .04$), with white boys displaying it more frequently than black boys. Black boys also tended to display more demand/submission behaviors than white boys, although the difference was not statistically significant. These results suggest an interaction between race and gender in the selection of photographs with seductive behavior; overall racial differences exist, but when examined for girls and boys separately, the differences between black and white girls diminish yet become more pronounced for black and white boys.

Dress

A majority of the teens depicted themselves fully dressed, especially the boys (see Table 3). To address the research questions of whether there were gender and race differences in the depiction of the amount of dress in profile pictures, the values were scaled from 1 (fully dressed) to 3 (partially dressed) and analyzed using a nonparametric Mann Whitney test. The analysis revealed that females significantly more often than males posted pictures in which they were revealingly dressed ($z = -2.39, p = .02$). There was also a difference between white and black teens, with whites posting pictures in which

Table 3. Dress (percentages within gender and race).

Dress	Total (<i>n</i> = 319)	Female (<i>n</i> = 163)	Male (<i>n</i> = 156)	White (<i>n</i> = 251)	Black (<i>n</i> = 68)
Full	62.6%	51.3% _a	74.2% _b	60.4%	70.6%
Revealing	20.4%	39.2% _a	1.3% _b	20.4%	20.6%
Partial	16.9%	9.5% _a	24.5% _b	19.2% _a	8.8% _b

Note: Subscripts _{a,b} indicate significant differences between members of the pair.

they showed skin more frequently ($z = -1.81, p = .07$), although it did not quite achieve statistical significance.

Mann Whitney tests were run for each race and each gender separately to assess whether gender and race interacted in the amount of dress displayed in profile pictures. Black girls and boys differed significantly in amount of dress ($z = -2.88, p = .004$), whereas white girls and boys did not ($z = -1.35, p = .18$). Moreover, white and black girls did not differ in amount of dress ($z = -.43, p = .67$), but black boys were fully dressed in their pictures significantly more often than white boys ($z = -2.27, p = .02$). These results indicate a complex interaction between race and gender: black boys differ from the rest in amount of dress displayed in profile pictures, while black and white girls and white boys pattern relatively similarly, although white males prefer partial, and females prefer revealing dress (see Appendix 3).

Discussion

Our first research question asked whether there are differences in distance, behavior, and dress in the profile pictures that boys and girls posted on a teen chat site. Girls overall tended to choose pictures at a close distance to the camera (showing only their face or upper torso), whereas boys preferred pictures in which they were further away. In their study of f2f interactions, Aiello and Jones (1971) and Bauer (1973) found that females in dyadic conversations stand closer together than males do, and Simpson et al. (1996) found that women tend to lean forward more in conversational interaction. It seems that online profile pictures project a similar “conversational” dynamic as regards gender, with female users inviting greater intimacy with their viewers and male users maintaining a greater distance.

As regards behavior, girls posted profile pictures in which they displayed seductive behavior significantly more frequently than boys did. The boys’ behavior was more varied: they posted images in which they were not looking directly at the viewer, images in which they seemed to be inviting friendship by looking directly at the viewer, and images in which they were looking down at the viewer significantly more often than girls did. These results are consistent not only with previous research on gender and visual self-presentation online (e.g., Kapidzic and Herring, 2011, which analyzed some of the same data), but also with gender differences in posture and gaze in f2f interaction (e.g., Simpson et al., 1996). They also recall Goffman’s (1979) findings of how women and men are presented in magazine advertisements, as well as in the mass media more

generally. It seems that the teens who posted profile pictures to the chat site we studied have internalized the societal message that women should be submissive and sexually alluring and men should be powerful and emotionally remote (cf. Durham, 2008).

Girls and boys also differed significantly in their dress: most boys posted pictures of themselves fully clothed, with a secondary tendency towards pictures displaying their nude upper body, whereas almost half of the girls chose images in which they were revealingly or partially dressed.

The second research question asked whether there are differences in the distance, behavior, and dress in the profile pictures that black and white teens posted. No significant race differences in distance were found. As regards behavior, however, whites displayed seductive behavior more than blacks. There are also race differences in the extent to which the teens present themselves fully clothed versus revealingly dressed. Whites more often posted pictures in which they wore revealing clothing, whereas blacks tended to be fully dressed.

The third research question asked whether gender and race interact in teen profile pictures. Analyses grouping the data according to subgroups of race and gender showed that boys contrasted along racial lines more strongly than girls in the distance they portray in their profile pictures. Boys also contrasted more strongly in behavior: white boys displayed seductive behavior significantly more often than black boys, whereas white and black girls patterned together, overwhelmingly preferring seductive poses. Similarly for the variable dress, while teens of both races favored demure clothing, white boys exposed significantly more skin than black boys, a difference that was not found for girls, who dressed more revealingly overall than boys. These results suggest that black and white girls share norms of self-presentation more than black and white boys do.

In many respects, the results of the present study parallel those of the f2f studies cited in the literature review. One exception is that we found no overall race difference in distance in the profile photographs (cf. Aiello and Jones, 1971), although like Bauer (1973), we observed an interaction between race and gender, with white males maintaining the greatest distance. All our behavior results for gender are consistent with past f2f findings. Although past research did not address seductive behavior according to race, our results for *offer* reproduce those of LaFrance and Mayo (1976) for gaze avoidance, with black males looking away most often and white females least often (see Appendix 1). Our results for dress also support past research for gender (no f2f research was available for race), except for the 28% of white males who were partially dressed (shirtless) in their photos.

The present study also reveals new findings. Race differences in the profile photos were more pronounced for boys than for girls. Moreover, with the exception of distance, black boys presented themselves in ways that could be considered more traditionally masculine (aloof, covered up) than white boys, whose tendencies towards seductive poses and revealing dress resemble the sexualized patterns characteristic of white girls. The results for the white boys are inconsistent with traditional gender norms, although they provide further evidence of an emerging trend for young male bodies to be sexualized (Manago et al., 2008).

Media portrayals very likely influence these self-representations, particularly as regards sexualization. Although the influence of stereotypical portrayals in the media has

not been as widely studied for men as for women, male bodies in the media have become increasingly muscular (Leit et al., 2001), and there is an increasing tendency to show exposed male bodies in magazine advertisements (Reichert and Carpenter, 2004).

It would appear that white teens are more influenced by these mainstream stereotypes than black teens. Previous research (Botta, 2000) has shown that black adolescent girls' body image is not affected by popular television shows with mostly white casts. Botta invoked social comparison theory (Festinger, 1954) to account for this finding, implying that white characters do not present realistic models for black girls to compare themselves to, and hence they do not make the comparison as readily (see also Parker et al., 1995). Social comparison theory may explain why black male adolescents do not represent themselves in a manner as sexualized as their white counterparts in their online profiles, given that non-white males tend to be underrepresented in mainstream western media. At the same time, blacks in the media present an alternative style for black youth to emulate, based in the cultures of hip-hop and rap (Kitwana, 2002). In general, the patterns observed in our data for black boys are consistent with what Majors and Billson (1992) call "the cool pose", whereby black adolescent males maintain distance, control, lack of emotion – act "cool" – as a way to create self-esteem and dignity in the face of discrimination by dominant white society. "The cool pose" is portrayed in films, television shows, and advertisements targeted at African Americans, and these media shape the behavior of black youth, according to Kitwana (2002). Black males in "the cool pose" are usually fully dressed.

In contrast, white teens in western societies are constantly exposed to sexualized images of possible role models. This is especially the case for girls. Females are often portrayed as sex objects on popular television (Greenwood and Lippman, 2010) and wearing suggestive clothing and posing seductively in advertisements (Reichert and Carpenter, 2004). Consumption of media portraying sexually objectifying content has been found to be positively correlated with female self-sexualizing behaviors, offline (Nowatzki and Morry, 2009) and online (Kapidzic, 2011), as well as with attitudes that endorse such behaviors (Ward et al., 2005). The present results further suggest that teen girls are embracing media stereotypes and modeling their behavior on them.

It is interesting, in this respect, that black girls pattern similarly to white girls. According to Botta's (2000) study, black girls should internalize mainstream ideals of female beauty less than white girls, since the ideals mostly center around Caucasian body types and are modeled by (thin, young, often blond) white women. In a study of female body image and race, Parker et al. (1995) found that white teen girls expressed more dissatisfaction with their bodies and had more rigid concepts of beauty, which the authors attributed to cultural factors, including socialization through the media and playing with Barbie dolls in childhood. Black teen girls had more flexible concepts of beauty, in which external attributes were de-emphasized, and personality and inner beauty were emphasized. The black girls, Parker et al. concluded, were less concerned with the "ideal" girl from the media. The findings of the present study suggest that trends are changing as regards beauty ideals among black girls, however, possibly due to the wide exposure in the mainstream media of female African American celebrities, such as Beyoncé and Tyra Banks, whose appearance tends towards the Caucasian ideal, and who are typically portrayed revealingly attired in seductive poses.

Of the profile photographs analyzed, only a handful represented the subjects in ways that deviated from the gender and race norms of self-presentation identified above (e.g., making faces). The fact that the overwhelming majority of photos show subjects in poses and dress in line with societal and media ideals of appearance for their gender and race supports the findings of previous studies that internet users select profile photos based on their perceived attractiveness (Strano, 2008). These behaviors are independent of actual physical attractiveness; rather, they can be manipulated by any user. At the same time, it is striking that the (presumably unconscious) “manipulations” these teens made through their photograph choices reproduce culturally dominant ideologies of gender and race, calling into question the supposedly agentic presentation of the self online.

Conclusion

Two main findings of this study stand out. The first is the similarity between the characteristics of the static profile photographs on the teen chat site and the findings of previous literature on f2f interaction. This is surprising *prima facie*, because not only are there obvious technological differences between the two modalities, but the purposes and contexts of f2f and online communication seem quite different. For example, f2f interaction is often dyadic, whereas profile photos are broadcast to a mass public. Yet the parallels with past findings suggest that there are strong perceived similarities in the minds of users between f2f communication and participation via photographs in contemporary nonymous social media environments. In both modalities communicators are presenting social selves that are available for interaction. As Zhao et al. (2008) point out with reference to Facebook, on social media sites it is not what one says about oneself as much as how one behaves, including via photo uploads, that constitutes one’s identity claims. To this can now be added one’s self-presentation in the photographs themselves – one’s posture and eye gaze, dress, and distance from the viewer, along with other visual semiotic cues such as facial expression, hairstyle, and objects in the picture (Kress and Van Leeuwen, 1996).

Second, the findings show how subtle content variation in images can construct gendered and racialized online identities. Internalization of cultural norms, socialization processes, and popular media were invoked to explain these trends, which we assume are largely unconscious. That is, we assume that teens select photos based on the images’ attractiveness (whatever that means to them in the context of their peer group), but that the criteria for attractiveness remain largely below the level of conscious reflection. Much as, for example, women unconsciously tilt their heads and look up at their interlocutors in flirtatious f2f interaction, social media users attend unconsciously to aspects such as gaze, posture, dress, and proximity to the camera in the selection of profile photos. That is, it is information “given off”, rather than “given”, in Goffman’s (1959) terms. That what is given off reflects and reproduces gender and race in terms of culturally dominant ideologies adds to the body of evidence that new technologies are not as liberatory in terms of personal (re)invention as has often been claimed (e.g., Herring, 2003; cf. Danet, 1998).

A limitation of using content analysis to analyze racial representations is the problematic nature of identifying race based on appearance. Racial and ethnic identity are

complex constructs that might differ from the racial labels assigned to persons based on their physical features (Omi and Winant, 1994); thus it is possible that coding for apparent race on the basis of physical features might misrepresent the self-identification of the teens in our sample in some cases. At the same time, racial categories have a legitimate claim to physical reality (Tang et al., 2005),⁹ as well as a natural psychological basis that facilitates understanding differences that cut across categories (Prentice and Miller, 2007). Nonetheless, the validity of racial identification in future content analysis research could be enhanced by incorporating methods that allow individuals to self-categorize. Unfortunately, because the photographs for the present study were chosen randomly and saved without personal information to protect the privacy of the mostly underage subjects, no secondary validation measures of race were possible.

A further limitation concerns the generalizability of the findings. This study analyzed one popular teen chat site; examination of other social media sites may reveal different norms as regards profile photographs. On one LGBT (lesbian, gay, bisexual, and transgender) discussion site that we are aware of, for example, the norm is for users to post pictures of celebrities as their avatars. Visual self-presentation by other gender identities and other ethnic/racial identities should be analyzed in future research. Profile pictures on SNS such as Facebook introduce additional complexity, in that many users alternate among different photos depending on their mood, location, the season, and other factors. Digitally modified photographs pose yet another set of analytical challenges for future research.

Last but not least, studies are needed that ask users about their purposes for communicating in different modalities and their perceptions of the social opportunities available in each. A decade ago, Baym et al. (2004) found that college students perceived f2f and online media to be equally sociable; the students reported using different media to communicate with different people depending not on sociability but on their geographic proximity. That research needs to be updated to include social media sites, which are richer online environments than those previously available. It seems likely that the perceptual, as well as the representational, boundaries between offline and online interaction are blurring.

Nonymous online environments support richer self-presentations. At the same time, the shift towards “nonymity” online comes at a price. Cartoon avatars – and text-only character descriptions before that – lent themselves to play with identity and fantasy identities in ways that photographs do not. For better or for worse, nonymity brings the offline and the online worlds closer together through formats of self-presentation that are increasingly connected to the physical self.

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Notes

1. A MUD is a Multi-User Dungeon or Dimension.
2. As of 2006, 62% of girls and 93% of boys had seen online pornography before the age of 18 (Sabina et al., 2008).

3. The first 100 images in each subsample are the same as those analyzed for gender by Kapidzic and Herring (2011).
4. Codes assigned to gender: males = 0 and females = 1. Codes assigned to race: whites = 1 and blacks = 2.
5. Codes assigned to behavior: affiliation = 1, seduction = 2, submission = 3, offer = 4, other = 5.
6. It was not possible to determine what percentage of each race chose a photograph. The search criteria reveal the gender of persons without a picture, but not a person's race.
7. These percentages are similar to those reported by Finn (2011) for MySpace users: 70% white, 16% black.
8. The breakdown of race by gender: white (male 69%, female 67%), black (male 17%, female 20%), and other (male 13%, female 13%).
9. Tang et al. (2005) found a 99.9% concordance between individuals' genetic structure and their racial self-description, a stronger concordance than that between biological sex and gender.

References

- Aiello JR and Jones SE (1971) Field study of the proxemic behavior of young school children in three subcultural groups. *Journal of Personality and Social Psychology* 19(3): 351–356.
- Bauer EA (1973) Personal space: a study of Blacks and Whites. *Sociometry* 36(3): 402–408.
- Baym NK, Zhang YB and Lin MC (2004) Social interactions across media. *New Media & Society* 6(3): 299–318.
- Bell P (2001) Content analysis of visual images. In: Van Leeuwen T and Jewitt C (eds) *Handbook of Visual Analysis*. London: SAGE, pp. 10–34.
- Botta RA (2000) The mirror of television. A comparison of Black and White adolescents' body image. *Journal of Communication* 3: 144–159.
- Bruzzese A (2012) On the job: how to enhance your online image. *USA Today*, 14 October. Available at: <http://www.usatoday.com/story/money/columnist/bruzzese/2012/10/08/on-the-job-perceived-attractiveness/1618743/> (accessed 10 November 2012).
- Danet B (1998) Text as mask: gender and identity on the Internet. In: Jones SG (ed.) *Cybersociety 2.0*. Thousand Oaks, CA: SAGE, pp. 129–158.
- Dixon TL and Linz D (2000) Overrepresentation and underrepresentation of African Americans and Latinos as lawbreakers on television news. *Journal of Communication* 50: 131–154.
- Duggan M and Brenner J (2013) The demographics of social media users - 2012. *Pew Internet and American Life Project*. Available at: http://pewinternet.org/~media/Files/Reports/2013/PIP_SocialMediaUsers.pdf (accessed 5 December 2013).
- Durham GM (2008) *The Lolita Effect: The Media Sexualization of Young Girls and What We Can Do About It*. Woodstock, NY and New York: The Overlook Press, Peter Mayer Publishers Inc.
- Erikson EH (1968) *Identity: Youth and Crisis*. Oxford: W. W. Norton & Company.
- Festinger L (1954) A theory of social comparison processes. *Human Relations* 7: 117–140.
- Finn G (2011) A portrait of who uses social networks in the US (and how social media affects our lives). *Search Engine Land*, 16 June. Available at: <http://searchengineland.com/a-portrait-of-who-uses-social-networks-in-the-u-s-and-how-social-media-affects-our-lives-81653> (accessed 8 December 2013).
- Frith KT, Shaw P and Cheng H (2005) The construction of beauty: a cross-cultural analysis of women's magazine advertising. *Journal of Communication* 55(1): 56–70.
- Goffman E (1959) *The Presentation of Self in Everyday Life*. New York: Penguin Books.
- Goffman E (1979) *Gender Advertisements*. London: Macmillan.
- Grasmuck S, Martin J and Zhao S (2009) Ethno-racial displays on Facebook. *Journal of Computer-Mediated Communication* 15: 158–188.

- Greenwood DN and Lippman JR (2010) Gender and media: content, uses, and impact. In: Chrisler JC and McCreary DR (eds) *Handbook of Gender Research in Psychology*, vol. 2. New York: Springer, pp. 643–699.
- Hall PC, West JH and McIntyre E (2012) Female self-sexualization in MySpace.com personal profile photographs. *Sexuality & Culture* 16: 1–16.
- Herring SC (2003) Gender and power in online communication. In: Holmes J and Meyerhoff M (eds) *The Handbook of Language and Gender*. Oxford: Blackwell Publishers, pp. 202–228.
- Kapidzic S (2011) *The influence of personality and internalization of media ideals on Facebook image selection*. Masters' Thesis, Indiana University Bloomington, Bloomington, IN.
- Kapidzic S and Herring SC (2011) Gender, communication, and self-presentation in teen chat-rooms revisited: have patterns changed? *Journal of Computer-Mediated Communication* 17: 39–59.
- Kitwana B (2002) *The Hip Hop Generation: Young Blacks and the Crisis in African American Culture*. New York: Basic Books.
- Kornblum J (2006) Adults question MySpace's safety. *USA Today*, 8 January. Available at: http://www.usatoday.com/tech/news/2006-01-08-myspace-sidebar_x.htm (accessed 6 December 2013).
- Kress G and Van Leeuwen T (1996) *Reading Images: The Grammar of Visual Design*. New York: Routledge.
- LaFrance M and Mayo C (1976) Racial differences in gaze behavior during conversations: two systematic observational studies. *Journal of Personality and Social Psychology* 33(5): 547–552.
- Leit RA, Pope HG Jr and Gray JJ (2001) Cultural expectations of muscularity in men: the evolution of Playgirl centerfolds. *International Journal of Eating Disorders* 29: 90–93.
- Madden M, Lenhart A, Cortesi S, et al. (2013) Teens, social media, and privacy. *Pew Internet and American Life Project*. Available at: http://www.pewinternet.org/~media/Files/Reports/2013/PIP_TeensSocialMediaandPrivacy.pdf (accessed 5 December 2013).
- Majors R and Billson JM (1992) *Cool Pose: The Dilemmas of Black Manhood in America*. New York: Touchstone.
- Manago AM, Graham MB, Greenfield PM, et al. (2008) Self-presentation and gender on MySpace. *Journal of Applied Developmental Psychology* 29(6): 446–458.
- Nakamura L (1995) Race in/for cyberspace: identity tourism and racial passing on the Internet. *Works and Days* 25/26 13(1–2): 181–193.
- Nakamura L (2002) Head-hunting on the Internet: identity tourism, avatars, and racial passing in textual and graphic chat spaces. In: Nakamura L (ed.) *Cybertypes: Race, Ethnicity, and Identity on the Internet*. New York: Routledge, pp. 31–60.
- Nowatzki J and Morry M (2009) Women's intentions regarding, and acceptance of, self-sexualizing behavior. *Psychology of Women Quarterly* 33: 95–107.
- Omi M and Winant H (1994) *Racial Formations in the United States: From the 1960s to the 1990s*. New York: Routledge.
- Paasonen S (2011) Online pornography: ubiquitous and effaced. In: Consalvo M and Ess C (eds) *The Handbook of Internet Research*. Oxford: Blackwell, pp. 424–439.
- Parker S, Nichter M, Nichter M, et al. (1995) Body image and weight concerns among African American and White adolescent females: differences that make a difference. *Human Organization* 54: 103–114.
- Prentice DA and Miller DT (2007) Psychological essentialism of human categories. *Current Directions in Psychological Science* 16: 202–206.
- Reichert T and Carpenter C (2004) An update on sex in magazine advertising: 1983 to 2003. *Journalism and Mass Communication Quarterly* 81(4): 823–837.
- Sabina C, Wolak J and Finkelhor D (2008) The nature and dynamics of Internet pornography exposure for youth. *CyberPsychology & Behavior* 11(6): 555–560.

- Siibak A (2009) Constructing the self through the photo selection – visual impression management on social networking websites. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 3(1): article 1. Available at: <http://cyberpsychology.eu/view.php?cisloclanku=2009061501&article=1> (accessed 5 December 2013).
- Siibak A (2010) Constructing masculinity on a social networking website. The case-study of visual self-presentations of young men on the profile images of SNS Rate. *Young* 18(4): 403–425.
- Simpson JA, Gangestad SW and Nations C (1996) Sociosexuality and relationship initiation: an ethological perspective of nonverbal behavior. In: Fletcher GJO and Fitness J (eds) *Knowledge Structures in Close Relationships: A Social Psychological Approach*. Mahwah, NJ: Erlbaum, pp. 121–146.
- Soley LC and Reid LN (1988) Taking it off: are models in magazine ads wearing less? *Journalism and Mass Communication Quarterly* 65(4): 960–966.
- Strano MM (2008) User descriptions and interpretations of self-presentation through Facebook profile images. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 2(2): article 5. Available at: <http://cyberpsychology.eu/view.php?cisloclanku=2008110402&article=5> (accessed 5 December 2013).
- Tang H, Quertermous T, Rodriguez B, et al. (2005) Genetic structure, self-identified race/ethnicity, and confounding in case-control association studies. *American Journal of Human Genetics* 76(2): 268–275.
- Walther JB (1996) Computer-mediated communication: impersonal, interpersonal, and hyperpersonal interaction. *Communication Research* 23(1): 1–43.
- Walther JB, Slovacek CL and Tidwell LC (2001) Is a picture worth a thousand words? *Communication Research* 28(1): 105–134.
- Walther JB, Van Der Heide B, Kim S, et al. (2008) The role of friends' behavior on evaluations of individuals' Facebook profiles: are we known by the company we keep? *Human Communication Research* 34: 28–49.
- Ward LM, Hansbrough E and Walker E (2005) Contributions of music video exposure to Black adolescents' gender and sexual schemas. *Journal of Adolescent Research* 20: 143–166.
- Whitty MT (2008) Revealing the “real” me, searching for the “actual” you: presentations of self on an Internet dating site. *Computers in Human Behavior* 24: 1707–1723.
- Willem C, Araüna N, Crescenzi L, et al. (2012) Girls on Fotolog: reproduction of gender stereotypes or identity play? *Interactions: Studies in Communication & Culture* 2(3): 225–242.
- Yee N, Bailenson JN, Urbanek M, et al. (2007) The unbearable likeness of being digital: the persistence of nonverbal social norms in online virtual environments. *CyberPsychology & Behavior* 10: 115–121.
- Zhao S, Grasmuck S and Martin J (2008) Identity construction on Facebook: digital empowerment in anchored relationships. *Computers in Human Behavior* 24: 1816–1836.

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Appendix 1. Distance (percentages within race and gender).

Distance	Whites (n = 251)		Blacks (n = 68)	
	Males (n=125)	Females (n=126)	Males (n=31)	Females (n=37)
Close	41.6% ^a	54.0% ^b	48.4%	51.4%
Intermediate	48.8% ^a	34.1% ^b	45.2%	35.1%
Far	9.6%	11.9%	6.5%	13.5%

Note: Subscripts ^{a,b} indicate significant differences between members of the pair.

Appendix 2. Behavior (percentages within race and gender).

Behavior	Whites (n = 251)		Blacks (n = 68)	
	Males (n=125)	Females (n=126)	Males (n=31)	Females (n=37)
Affiliation	12.8% ^a	4.8% ^b	12.9%	5.4%
Seduction	32.8% ^a	77.0% ^b	16.1% ^a	59.5% ^b
Submission	17.6% ^a	0.8% ^b	29.0% ^a	2.7% ^b
Offer	33.6% ^a	15.9% ^b	41.9%	29.7%
Other	3.2%	1.6%	0%	2.7%

Note: Subscripts ^{a,b} indicate significant differences between members of the pair.

Appendix 3. Dress (percentages within race and gender).

Dress	Whites (n = 251)		Blacks (n = 68)	
	Males (n=125)	Females (n=126)	Males (n=31)	Females (n=37)
Full	70.2% ^a	50.4% ^b	90.3% ^a	54.1% ^b
Revealing	1.6% ^a	39.7% ^b	0% ^a	37.8% ^b
Partial	28.2% ^a	9.9% ^b	9.7%	8.1%

Note: Subscripts ^{a,b} indicate significant differences between members of the pair.