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I "Like" That: Exploring the Characteristics That Promote Social Media Engagement With News Photographs

While business models and technological innovations continue to disrupt journalistic practice, global image culture has never been stronger. Developed society is inundated daily with a torrent of images. Yet some of these are barely seen, while others almost instantly accrue scores of likes, shares, and comments. What, then, are the factors that constitute engaging, social photojournalism? Using Q methodology, which bridges qualitative and quantitative approaches, 30 participants ranked photos published on Instagram by news organizations or photographers and shared insight through interviews on what factors affect their engagement. In this way, the users' and the images' characteristics were both studied to shed light on why certain photos accrue more engagement and why certain types of people "like" certain types of content. The findings identify three types of users—feature lovers, newshounds, and optimists—and describe their motivations for interacting on the platform. Insights on how the number of people in the frame, the visibility of facial features, the presence of watermarks, and the post type affect user engagement were also gathered and discussed.

T.J. Thomson and Keith Greenwood

Since its founding in 2010, Instagram has amassed 500 million monthly active users who have shared more than 40 billion photos to date and post an average of 95 million photos and videos each day (Parker, 2016). While its users "like" an average of 4.2 billion posts each day, these interactions are not equally distributed. Some posts go unnoticed for years, while others accrue scores of "likes" in mere seconds.

Previous scholarship on Instagram has focused on the types of content that people post and the relationship between the number of posts and a user's follower count (Hu, Manikonda, & Kambhampati, 2014). Some research has been done on how photo content influences audience engagement. For example, one such study (Bakhshi, Shamma, & Gilbert, 2014) found that Instagram photos showing people's faces were 38% more likely to receive "likes" and 32% more likely to receive comments. Another study (Bakhshi, Shamma, & Gilbert, 2014) found that using Instagram filters—specifically those that increase warmth, exposure, and contrast—resulted in 21% more views and 45% more comments.

Research on social media is still in the early stages (Coelho, Oliveira, & Almeida, 2016), though, and while some content-specific features and their relationship to audience engagement on Instagram have been studied, not all features have received attention, nor have these features been studied as they relate to photographs published by news entities. Further, the focus on Instagram engagement has been overwhelmingly geared toward the *content* of the posts rather than to the characteristics of the platform's users. This research changes that by using Q methodology (Stephenson, 1953) and a grounded theory approach (Strauss & Corbin, 1997) to shed light on how people with certain characteristics engage with Instagram content and how certain features beyond those already studied impact engagement.

Literature Review

To set the foundation for this research, we explore (1) connections between the visual and the public, (2) media content distribution and organization processes, and (3) engagement on social media broadly and on Instagram in particular.

Connections Between the Visual and the Public

Trachtenberg's (2008) writing on photography as a container of collective memory is a useful starting point for expanding what characteristics beyond an image's content-specific features impact social media engagement. Two types of collective memory exist: that which is historical (and preserved through writings or photographs, for example) and that which is autobiographical, which has been personally experienced (Halbwachs & Coser, 1992). Collective memory includes a host of interrelated concepts, including nostalgia (whether real or imagined), identification, and affiliation.

Public identity depends on visual rhetoric (Hariman & Lucaites, 2003), and visual practices documented in the public media define reality, its social actors, and reinforce normative expectations of gender, race, class, and other forms of social identity. Press photographs masquerade as purely denotative but have inherent connotative structures (Barthes, 2007). These structures, according to Barthes (2007), function to integrate, assure, and stabilize. This research can help explain how the function of the image in terms of upholding or questioning cultural norms affects viewer engagement on social media.

Content Distribution and Organization

Traditional media production and distribution processes are resource intensive, asynchronous, and static. New models, made possible through wireless technology and mobile devices, have uprooted these processes and provided a way for the masses to produce content instantly, inexpensively, transparently, and interactively (Croteau & Hoynes, 2003; Thorsen, 2013).

Curation on social media differs from curation on legacy news media platforms. In the latter, an editor or algorithm selects content to promote based on defined values, while in the former, content is organized in reverse chronological order (Thorsen, 2013). Publishers' motivations for using social media as a news platform include increased reach, sometimes even independent of the parent organization's brand, and the desire to participate in behind-the-scenes, "inside scoop" aspects of a story (Newman, 2011).

Engagement on Social Media

Social media are characterized by participation, openness, conversation, community, and connectivity (Thorsen, 2013). Part of the way such participation and conversation occurs entails engagement through "liking" content, sharing it (dubbed "regramming" on Instagram), and commenting on it. This contrasts with the largely one-way asymmetric communication model that dominated 20th-century media (Hermida, 2011).

Social media engagement—that is, whether a post receives "likes," shares, comments, etc.—is influenced by three umbrella factors related to (1) the user account, including account age, gender of its publisher, etc.; (2) the post's context, such as time of day or location; and (3) content-specific features of the post, such as whether human faces are visible (Jaakonmäki, Müller, & vom Brocke, 2017).

Few studies have focused on posts' visual content and how it influences engagement (Jaakonmäki et al., 2017). Of the studies that do examine the relationship between content and engagement on Instagram, some have found that using light images, images with blue as the dominant color, a muted color palette, and a single dominant color increases "likes" (Lowry, 2013). Another study (Jaakonmäki et al., 2017) found that pictures with people and scenery increase engagement.

Peer-reviewed research has explored how some content-level characteristics affect Instagram engagement but has not yet focused on the users who interact with the platform's content. As such, the study's umbrella research questions are:

> RQ1: How does engagement with photographs published by news photographers or news organizations on Instagram vary among different types of social media users?
>
> RQ2: Within different groups of Instagram users, what characteristics of news photographs affect the degree of engagement?

Method

Q Methodology

This study applied a Q methodology approach to focus on Instagram users and their characteristics. Q methodology spans the qualitative-quantitative divide and allows for the systematic study of subjectivity—that is, why people select one option over another (Brown, 1993).

Q studies generally follow a three-step process. First, a concourse, defined as "the flow of communicability surrounding any topic" (Brown, 1993, p. 94) is developed. The concourse need not be restricted to words but can include visual

Table 1 Characteristics of Instagram Accounts Under Study

Entity Name	Entity Handle	Number of Posts	Number of Followers	Number Following
CNN	@cnn	3,146	3.4m	308
The New York Times	@nytimes	4,259	2.8m	492
The Guardian	@guardian	3,199	696k	193
The Washington Post	@washingtonpost	1,217	672k	386
The BBC	@bbc	739	119k	73
The Huffington Post	@huffpost	4,494	1m	529
Local media outlet where research took place	–	2,303	3,539	228
Regional media outlet where research took place	–	350	11.9k	307
Reuters	@reuters	4,776	1.2m	120
Agence France-Presse	@afpphoto	2,733	281k	195
Getty Images	@gettyimages	3,621	646k	301
The Associated Press	@ap.images	853	243k	303
Daniel Berehulak	@danielberehulak	476	118k	2,475
Jason Wambsgans	@ejwamb	34	369	32
Pete Muller	@petekmuller	433	147k	387
Marcus Yam	@yamphoto	592	56.4k	340

and aural elements, if desired. "A concourse can be gotten in a number of ways. The most typical is by interviewing people and jotting down or recording what they say, but commentaries from newspapers, talk shows, and essays have also been used" (Brown, 1993, p. 95). Second, after the concourse is developed, statements or media exemplars are rendered and displayed in random order to participants, who rank them using a Q sort. *Q sorting* refers to the process whereby participants rank the statements or media exemplars into separate piles, such as agree/neutral/disagree or positive/neutral/negative. Third, rankings undergo factor analysis so similarities and dissimilarities among them become apparent. Meaning is revealed both from the results of the Q sort as well as from the musings that happen during the sort and after it in focused interviews.

Defining a Concourse

In developing a concourse/Q sample, researchers should obtain a mix of statements/media exemplars (Brown, 1993). As such, this study's concourse (see Table 1) was drawn from Instagram accounts with geographic diversity (local, regional, national, and international accounts), organizational diversity (freelancers, staff photographers, and photographers for agencies/wire services), producer diversity (in terms of gender, race, and age), and content diversity (both in terms of the identities and conditions of those depicted and in terms of photographic approach [e.g., realism, pictorialism, symbolism, pastoralism, etc.]).

Specifically, the concourse contained images from the Instagram accounts of (1) the top five news websites (CNN, NYTimes, The Guardian, The Washington Post, and the BBC) as determined by Alexa monthly traffic statistics; (2) major news wire agencies (Reuters, Getty, AP, and Agence France-Press); (3) the two 2017 Pulitzer prize-winning photographers (Daniel Berehulak, freelance, for breaking news photography; and E. Jason Wambsgans, Chicago Tribune, for feature photography); (4) the 2017 Pictures of the Year International Newspaper Photographer of the Year and Photographer of the Year winners, Marcus Yam/*L.A. Times* and Pete Muller/*National Geographic* respectively; (5) one local media outlet in the city where the research took place; and (6) one regional outlet in the state where the research took place.

SocialRank, a New York-based social media analytics company that allows paid subscribers to see analytics on accounts other than ones they own or manage, provided the researchers in May

Table 2 Participants' Demographic Characteristics

No.	Age	Race	Nationality	Gender	Education	Occupation	Year Joined
1	19	White	American	F	Some college	Student	2012
2	26	Black	American	F	Grad school	Student	2015
3	23	White	American	M	Grad school	Student	2011
4	19	White	American	F	Some college	Student	2010
5	43	White	American	F	Bachelor's	Administrative assistant	2017
6	26	White	Polish	F	Grad school	Student	2012
7	21	Asian	Chinese	F	Some college	Student	2015
8	20	White	American	F	Some college	Student	2010
9	20	Hispanic	American	F	Some college	Student	2011
10	19	White	American	F	Some college	Student	2012
11	44	Mixed	American	M	Grad school	Photographer	2012
12	21	White	Mexican	F	Some college	Student	2013
13	20	White	American	F	Some college	Student	2014
14	25	White	American	F	Grad school	Student support specialist	2011
15	42	White	American	F	Grad school	Associate professor	2015
16	36	White	American	F	Grad school	Research fellow	2012
17	26	Asian	S. Korean	F	Grad school	Student	2012
18	21	Asian	Chinese	F	Some college	Student	2016
19	20	Black	American	F	Some college	Student	2011
20	37	White	American	M	Bachelor's	Video producer	2012
21	19	White	American	F	Some college	Student	2010
22	27	White	American	M	Grad school	Student	2012
23	26	White	American	F	Grad school	Graphic designer	2015
24	32	White	American	F	Grad school	Strategiccommunicationmanager	2011
25	36	White	American	F	Grad school	Higher ed student services	2015
26	33	White	American	F	Grad school	Editor/professor	2013
27	31	White	Ukrainian	F	Grad school	Student services	2012
28	20	White	American	F	Some college	Student	2014
29	25	White	American	M	Bachelor's	Student	2015
30	27	Asian	Chinese	F	Grad school	Student	2013

2017 with a list of the top-three-performing Instagram posts (out of the most recent 66 posts[1]) for all 16 accounts. The researchers downloaded the top-performing posts from each account for a total of 48 images. In this way images from both elite, game-changing outlets and more local, familiar ones were used to explore whether the pinnacle of skill or the nostalgia of the familiar was more impactful in prompting engagement.

Once the images were downloaded, the researchers reviewed them and made several sanitizing decisions. They removed one text-only image and replaced it with the next-most-popular image on that account and also decided to retain identifying marks (such as watermarks or regram symbols) because users would potentially encounter these marks in their everyday usage, and the researchers were curious to see if or how they would impact engagement.

Participant Sampling, Recruitment, and Piloting

This study made use of purposive sampling, a type of nonprobability sampling where one recruits from a population who shares certain characteristics, knowledge, or experiences (Tongco, 2007). In this case, participants who

Number of Posts	Posting Frequency	Number of Followers	Number Following	Frequency of Use
228	1–2 times/week	992	829	Multiple times/day
74	Every 6–8 weeks	404	23	Multiple times/day
734	5/week	480	591	Multiple times/day
542	2 times/week	997	626	Multiple times/day
28	2 times/month	52	140	Few times/week
554	1–2 times/week	275	414	Every other day
58	Every other week	38	77	Once a week
1240	Weekly	3029	2345	Multiple times/day
0	Not at all	193	161	Once daily
127	Weekly	1833	1102	Multiple times/day
1138	2 times/week	464	613	Multiple times/day
279	Weekly	547	513	Multiple times/day
45	2 times/month	248	308	Multiple times/day
1097	Daily	275	610	Multiple times/day
498	3 times/week	54	144	Multiple times/day
318	1–2 times/week	424	499	Multiple times/day
346	2–3 times/week	222	195	Multiple times/day
13	1/month	64	180	Every other day
72	1 time every 2 months	1381	815	Multiple times/day
289	Few times/month	165	90	Once daily
64	1/week	1452	951	Multiple times/day
182	1/month	230	213	Multiple times/day
255	Daily	246	827	Multiple times/day
1988	5 times/week	381	850	Multiple times/day
34	1–2 times/month	119	178	Once a week
747	Every other day	219	192	Multiple times/day
769	Once a week	212	771	Multiple times/day
12	4 times/year	444	360	Once daily
59	2/month	551	529	Multiple times/day
98	Once every few weeks	198	176	Once daily

were at least 18 years old and had an active Instagram account were targeted for recruitment after the researchers obtained Institutional Review Board approval. In all, 30 individuals fulfilling these characteristics and living in the U.S. Midwest responded to posters and digital invitations and consented to participate in the study. Subjects and demographic characteristics are listed in Table 2. The researchers also recruited an independent participant to test the ranking process before formal data collection began.

Q Sorts

Participants met individually with a member of the research team to perform a Q sort and answer interview questions about their choices. After completing a demographic questionnaire, participants were given a stack of 48 printed, color images on uniform 5.5 x 8.5 cardstock. Each image was, to mimic the viewing experience on Instagram, sized uniformly by width and was also accompanied by a number so that the researchers could track which images were placed where and so participants could refer to the images by number during the interviews.

Participants were encouraged to begin the sort by making three piles of images—ones they could definitely see themselves clicking "like" on, ones that they were neutral about, and ones they didn't think they would click "like" on. Participants then refined the sorting by placing each image into one of 11 unequal columns ranging in value from –5 to +5. The two least-liked images were placed in the–5 column, the three next least-liked images in the –4. Continuing on, the participants placed four images in the –3 column, five images in the –2 column, six images in the –1 column, and eight images in the 0 or neutral column. The two images the participants most liked were placed in the +5 column, the next three in the +4 column, followed by four images in the +3 column, five images in the +2 column, and six images in the +1 column. When completed, the participants had sorted the images into an inverted pyramid with the most- and least-liked photographs on opposite outer edges and the neutral photographs in the middle.

Interviews

Following the Q sort procedure, the researchers interviewed the participants about the five photos with which the participants were most and least likely to engage. They then asked each participant the following five questions about their Instagram behavior:

1. Are you more likely on your own Instagram feed to engage with ("like" or comment on) news photographs or feature photographs?

2. How does the number of people in the frame impact your engagement, if at all?

3. How does the visibility of facial features impact your engagement, if at all?

4. How does the presence of watermarks and/or regram symbols impact your engagement, if at all?

5. Are you more likely to engage with still photos or video on Instagram?

Analysis

The Q sorts were analyzed using PQMethod software. The individual sorts were first entered into the software, then a centroid analysis was conducted using Brown's (1980) method to identify unrotated factors. The factors were then rotated using the varimax method, which identified three factor groups of participants. The first group comprised 13 participants and accounted for 14% of the variance. The second group comprised eight participants and accounted for 10% of the variance. The third factor group also comprised eight participants and accounted for 9% of the variance. Correlation between Group 1 and 2 was .0881. The correlation between Group 1 and 3 was .1409. The correlation between Group 2 and 3 was –.1680. One participant did not load onto any factor.[2]

The interviews were transcribed and, using a modified grounded theory approach (Glaser & Strauss, 1967), the researchers undertook a line-by-line analysis of interview transcripts and applied codes to anchors and key data points. Codes were then subsumed into broader concepts and categories through the constant comparative method. The researchers created memos during this process to track initial observations and organize emerging patterns and themes. Next, the researchers conducted negative case analyses and refined concepts and categories until all the data were examined and accounted for.

Findings

The first research question asked, "How does engagement with photographs published by news photographers or news organizations on Instagram vary among different types of social media users?" and was answered through the Q sort, which identified three groups. An overview of each group will be provided followed by the five photos the group ranked as most and least engaging.

Factor 1, "The Feature Lovers" (13 Individuals)

This group engaged with colorful sunsets, portraits, and "exciting" photos that showed adventure and travel while ignoring photos that depicted politics or had unfamiliar connotations or meanings. Members of the group were overwhelmingly female, White, had following and follower counts in the triple digits, and were more likely to engage with feature over news photos. Additionally, all the participants in this group preferred stills to video, and 11 of the 13 preferred photos with one or two people compared to photos with groups of people. The participants in the first factor grouping engaged most with the images in Figure 1.

Four of this group's five most-engaged-with photos are international and were photographed far outside the borders of the United States, specifically in Angola and the United Kingdom. All five photos were also published by overseas entities, and four of the five photos depict people,

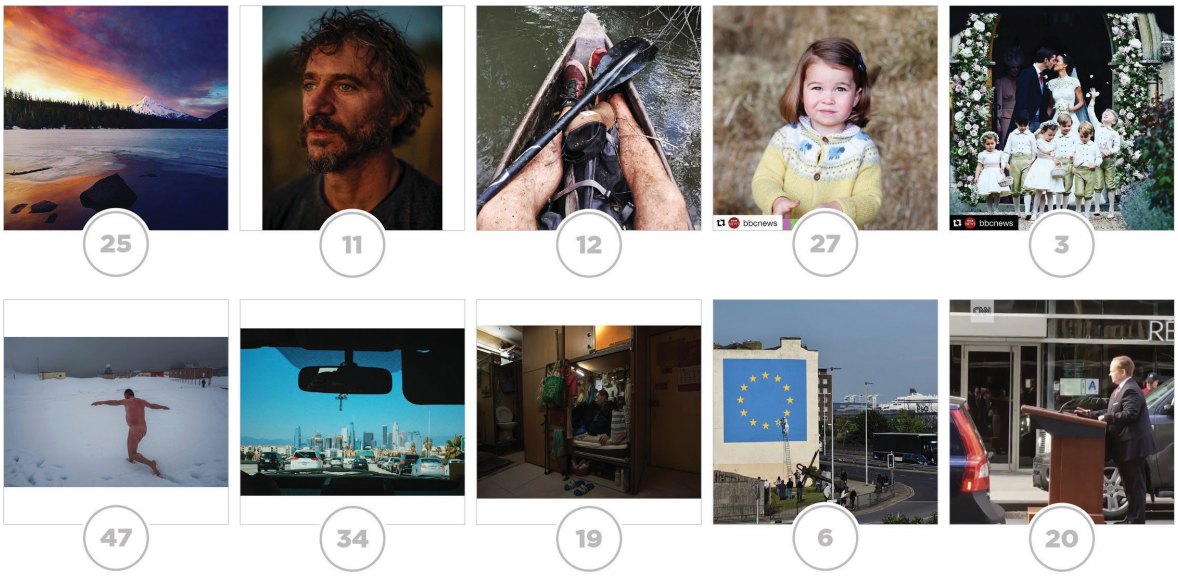

Figure 1 (Top) Photos 25, 27, and 3 published by @bbc. Photos 11 and 12 published by @petekmuller.

Figure 2 (Bottom) Photo 47 published by @danielberehulak. Photo 34 published by @yamphoto. Photo 19 published by @ap.images. Photo 6 published by @guardian. Photo 20 published by @cnn.

including recognizable celebrities, which participants said attracted them. "I follow all of the royal Instagram posts. I like seeing Princess Charlotte. My daughter's about the same age as Charlotte, so I'm always watching that" (Participant 26). Participants mentioned that the (warm) colors in photos 25, 11, and 12 attracted them, as did the "raw" and "gritty" aspects of photos 11 and 12. Despite depicting the grit and grime of everyday life, the strong composition and aesthetics of these photos earned the participants' engagement.

Participants in the first factor grouping engaged least with the images in Figure 2.

Images with unfamiliar settings or ambiguous behavior did not fare well with this group of participants. None of the participants in this group, for example, was able to identify the E.U. flag (photo 6), which negatively impacted their interest and engagement.

> Geography is not my strong suit. I see that flag on the side of the building and I'm like, I don't know where that is. I don't care, which is probably not what it should evoke, but I think without more information, I don't have enough to go on to be interested in the story that picture is telling. (Participant 24)

Similarly, the photo of the naked man was not well liked because participants said they were confused about what he was doing and why he was naked. "47 is a man running through snow and, once again, I don't understand why this man is running. I would just keep scrolling through if I saw it. It doesn't speak to me" (Participant 27). Some of these photos, such as the one that depicts a slice of Hong Kong's cramped and derelict housing market (photo 19), also showed gritty or grimy life circumstances but lacked the symmetry and aesthetics that prompted similar photos to be engaged with.

Finally, political images—or those satirizing them—did poorly with this group. Few people recognized and identified Melissa McCarthy dressing up as Sean Spicer, for example. "Number 20, I wasn't really sure what was being depicted. It looked like some gentleman of official stance holding a press conference. I felt like the picture might have been more impact worthy if I knew what he was addressing" (Participant 28).

Factor 2, "The News Hounds" (Eight Individuals)

This group engaged most strongly with photos of tragedy, politics, and global culture while eschewing animal pictures and those that were considered "basic." Members of the group were either female or gay males, all were students, most posted rather infrequently (fewer than one post every two weeks), had follow and following counts in the triple digits, engaged with news over feature photos, said watermarks either universally or conditionally affected their engagement, and preferred wider, group shots that showed more context. The participants in the second factor

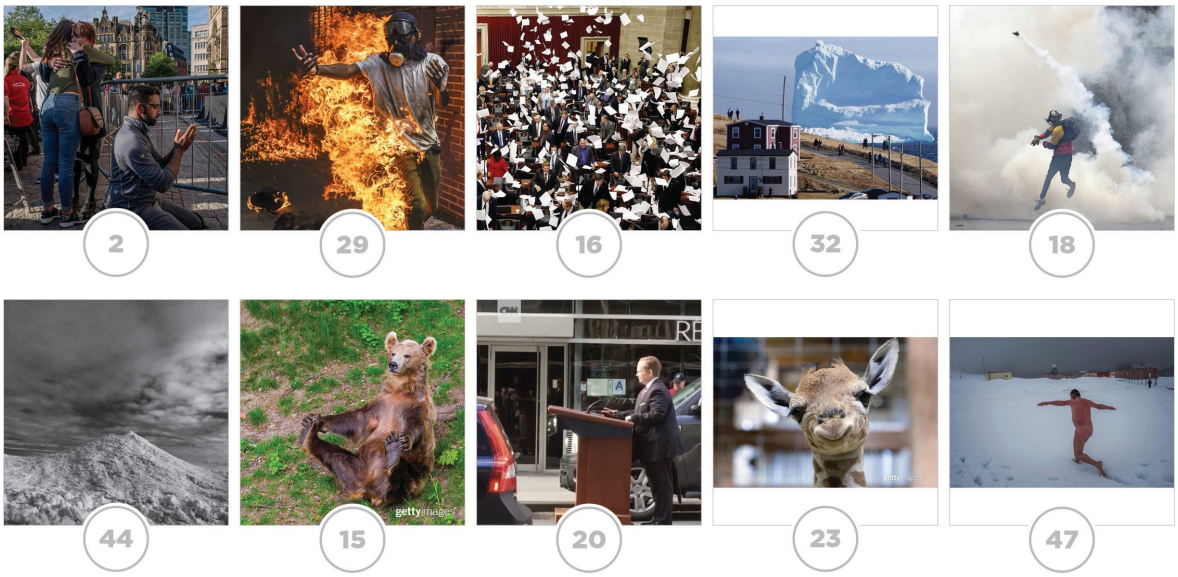

Figure 3 (Top) Photo 2 published by @nytimes. Photo 29 and 18 published by @afpphoto. Photo 16 published by the local news media outlet. Photo 32 published by @washingtonpost.

Figure 4 (Bottom) Photo 44 published by @ejwamb. Photos 15 and 23 published by @getty. Photo 20 published by @cnn. Photo 47 published by @danielberehulak.

grouping engaged most with the images in Figure 3.

Images of chaos, controversy, and conflict resonated strongly with this group, many of whom said they used Instagram as a news-gathering platform. "I'm attracted to news photos just so I know all the stuff that's going on that I wouldn't really know about otherwise. I don't have a TV to watch the news so I have to find out other places" (Participant 29). The photos this group reacted strongly to included the aftermath of a bombing, a protester who caught fire during a protest against the Venezuelan president, members of a state legislature throwing papers into the air on the final day of a session, the effects of global warming, and a protestor throwing a tear gas canister back to police during another clash in Venezuela.

> I appreciate these photos because they have some element of intensity to them. I study and am interested in things like political unrest. I'm interested in protests. I'm interested in political violence. Both of these are things that make me ask questions or things that I'm particularly interested in understanding. (Participant 22)

Four of the five images were taken outside the borders of the United States, and participants' news savviness allowed them to identify the circumstances in a number of the photos, which boosted their engagement with them.

The participants in the second factor grouping engaged least with the images in Figure 4.

In contrast to the serious, life-and-death photos and circumstances that were attractive to feature group two, the photos that appealed to them least were banal, trivial, and "spammy." Four of the five photos feature single subjects, either close-up or isolated on plain backgrounds, that lack significant context. They functioned, for the participants, more as stock art or filler content than as posts that deserve to be studied, analyzed, and learned from.

> 23 is a Getty Images photo of a giraffe smiling. You could see that on any spam account, really. Usually the spam accounts you follow are like, "Oh, it's cute, heartwarming," and then you scroll past it. I don't really "like" it. (Participant four)

Another participant agreed. "Maybe if I had a little more context I would be OK with it, but just looking at it it's like, I don't care about this at all" (Participant 4).

Factor 3, "The Optimists" (Eight Individuals)

This group engaged most strongly with images that were uplifting, positive, empowering, or funny, while disregarding photos that showed armed force, military might, or weapons of destruction. Members of this group were largely early adopters (joined Instagram in 2012 or

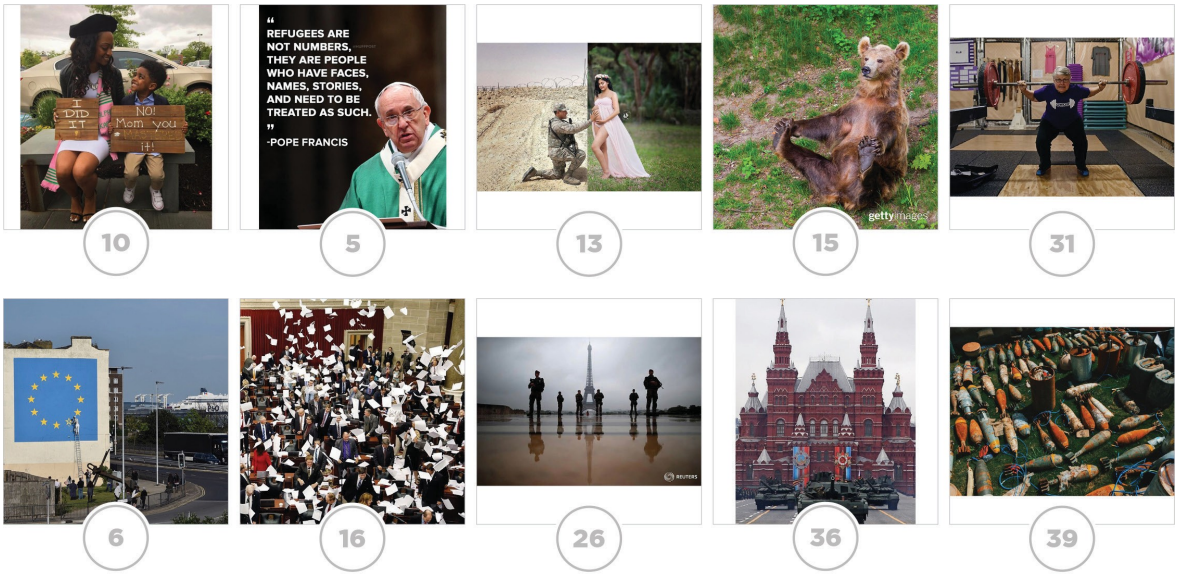

Figure 5 (Top) Photos 10, 5, and 13 published by @huffpost. Photo 15 published by @getty. Photo 31 published by the local news media outlet.

Figure 6 (Bottom) Photo 6 published by @guardian. Photo 16 published by the local news media outlet. Photos 26 and 36 published by @reuters. Photo 39 published by @yamphoto.

earlier), had triple-digit following and follower counts, had visible faces in their profile pictures, preferred visible facial features in Instagram content, and were divided on whether they engaged more with stills or video. The participants in the third factor grouping engaged most with the images in Figure 5.

These participants looked for uplifting, inspiring, positive, and motivating content with which to engage.

> I like number 10 because I think it's inspirational. It kind of appears she had a child maybe before she had intended to or she didn't get done what she had planned before she had a child and the photo just shows that, even if you have a kid unplanned, you can still accomplish what you want. (Participant 10)

The messages the photos were trying to convey, for this group, were more important than the pictures themselves. "I like number five because I like the quote and identify with that idea in terms of social justice stuff. It was more the quote was there than that the image was particularly good" (Participant 16). The elderly woman weightlifting was seen as a sign of someone beating the odds and being unconventional. "I like 31 just because . . . it's showing how strong she is, and I see my own grandma, number one, fighting off cancer. The photo symbolizes that, in a way, just how strong grandmas can be, potentially" (Participant 10). The bear's (photo 15) engaging nature, participants said, was due to its cuteness and lack of a politically charged nature.

The participants in the third factor grouping engaged least with the images in Figure 6.

The optimists shied away from international content, content that was political, or had military or aggressive themes. Four of the five images in this set were taken outside the borders of the United States. One was taken in France, one in Russia, one in the United Kingdom, and one in Iraq. In one photo (6) a metalworker chips away a star from the E.U. flag as a demonstration against the Brexit movement, while in another (16) politicians throw papers into the air during the last day of a session. Military force is present in a majority of the images, including handheld guns, tanks, and an arsenal of explosives.

Participants regarded these images as distant ("It just has nothing to do with me. That's why I didn't really like it. I don't know what's going on, either" [Participant 9]), depressing ("This remind me of all the turmoil in the world. All the stress of everything going on and wars" [Participant 5]), and foreign ("36 I didn't like because it seemed . . . obviously, that's not the United States. It just kind of looked scary in a way to me, I guess. It just reminds me of wars going on

elsewhere and countries potentially going to war with us" [Participant 10]).

Participant Interviews

The second research question asked was "Within different groups of Instagram users, what characteristics of news photographs affect the degree of engagement?" and was answered through a five-question interview with each participant. The first of the five questions concerned whether participants were more likely to engage with news or feature photos.

Feature versus News. Twenty-one participants (including 12 from the first factor group [the feature lovers], two from the second factor group [the news hounds], six from the third factor group [the optimists], and the one participant who didn't load onto any factor groups) said they engaged with softer, more feature-oriented photos more than news photographs on Instagram. Six participants said they engaged more with news than feature photography, while three said they engaged with news and feature photography equally.

Participants in the first and largest group described Instagram as an oasis where political or news content was less prevalent and where they could see visually interesting things and stay up-to-date with their friends' and families' lives.

> For the most part, Instagram is the one place where I don't partake in politically charged debate or post political things. It's mostly just about seeing what my friends are doing and looking at cool, artsy photos. I follow some tattoo artists and different things like that. This is the one place in my social media life that I really use for escape. (Participant 6)

The information value of Instagram as a platform was less important for this group than were its social and entertainment functions.

> Instagram is a social media for me. I don't like to focus on news on that platform. I like to see very beautiful photos from others' lives. There are some really wonderful photographers on Instagram who share really wonderful photos. I love their photos. My top five photos here have nothing to do with news. They just make me happy, and I like that feeling. (Participant 7)

Other reasons that participants gave for engaging more with feature rather than news photography was that it seemed weird for them to "like" news stories about negative events ("I would say I'm definitely more likely to 'like' a feature photo, mostly because I have a weird personal thing about 'liking' a news story that's kind of tragic" [Participant 14]), and doing so was not empowering ("I might not want to like something that's so tragic or so terrible, particularly, if the comment doesn't evoke, 'Oh, there's something else I can like and be in solidarity with'" [Participant 24]).

For the minority of participants who said they engaged with news photography more, they said it was because such behavior was (1) a rebuke to what they thought were trivial photos and (2) that "liking" news photos increased their visibility. In the case of the former:

> If I'm scrolling through photos, I'd be more likely to click on a news photo than just some photo of a girl posing on a wall. I'm a news junkie, and I'm really curious about things, and there has to be more of a story behind the news photo than why a girl is posing in front of a wall. (Participant 13)

And in the case of the latter:

> By liking it, I have the intention that I want others to see these news photos, too. If you go to my liking page, the second tab, you can see what I've liked. By 'liking' these images, I increase their reach and exposure. (Participant 17)

Number of People in the Frame. The second question explored how the number of people in the frame impacted users' engagement. Nineteen users (including 10 from the first factor group, four from the second, four from the third, and the one participant who didn't load onto any factor groups)—almost two-thirds of the sample—said their Instagram engagement was negatively correlated with the number of people in the frame. Seven users said they preferred photos with more people, and three said the number didn't matter.

Participants in the first group said photos with single subjects or very small groups were easier for the photographer to compose and easier for the user to view, especially on small screens. Their responses included variations of:

1. "The more focused it is on the person, the more engaged I am. The portraits are pretty cleanly shot. As the number of people increases, it just starts to get too busy or it just doesn't really matter what's happening in the scene." (Participant 8)

2. "Group shots are hard to be visually appealing, sometimes, because you need layering and depth, otherwise it just looks like a photo of a bunch of people, whereas portraits are easier to make more visually appealing. I'm probably more likely to look more deeply at a portrait." (Participant 4)

3. "Photos with single people in them are more clear. Whereas, photo 16, it just seems chaotic to me, especially on a small screen. There's too much going on." (Participant 5)

The seven participants who said they engaged more with multiperson photos did so because (1) it was a refreshing change to the stream of selfies in one's feed; (2) the presence of multiple people indicated a bigger impact and thus deserved more attention; and (3) more people in the frame usually results in a wider focal length, which can increase context. In the first case:

> I prefer more of a multiperson shot just because we're in the era of selfies, so when you see more than one person, it kinda stands out more than the single-portrait shots that I'm normally used to seeing and used to. I like the pictures with multiple people. (Participant 9)

In the second: "Group shots show something big is at work. With 24 or 2, there's so many people there that you know something big has to have happened" (Participant 13). And in the third:

> I think I would prefer a picture with more than one person. I think, in general, I like pictures that are able to depict more of what's going on so if it's a wider shot, you'll be able to see more of what's going on and have more context. (Participant 28)

The remaining three participants said their engagement with photos depicting people depended on whether they knew the people depicted and on how the photo was framed.

> I can be very attracted to a photo if there's only one person in it or if there's multiple people. I think it just depends on how well the picture is framed. The nice thing about having multiple people in a picture is that, usually, there's emotion or interaction that might make it a little more visuals friendly. Having said that, I'm very attracted to portraits, too, if they're well lit and well composed. (Participant 11)

Visibility of Facial Features. The third question concerned how visible facial features impacted users' engagement. A majority (18 participants—eight from the first factor group, three from the second factor group, six from the third factor group, and the one participant who didn't load onto any factor groups) said that visible facial features positively affected their engagement because of how facial features convey emotion and are more unique than other body parts or objects.

> I think I'm attracted to seeing a person's face, and the reason for that is, I think, photography, sometimes, particularly for beginners, they are nervous or shy or hesitant to approach people, and you'll see it in their work. You'll see a silhouette in a lot of pictures or you'll see the back of somebody's body, or they'll take a picture from far away so the person is not very big. I like to see photographers to get close to people. I like to see them push their comfort zones and really try to engage the viewer with the person who's in front of the camera. Facial features, to me, are very important. (Participant 11)

The participants interviewed said the eyes, especially, were key to increasing their engagement.

> If I see photos of just someone's hands, then I'd be like, "What? What is this?" It wouldn't really tell much of a story. If it would be a part of a collection of photos, that would be different, but if it was just a picture of someone's hands, that could be anything—grief, depression. When you show someone's faces, their eyes are kind of the windows to their souls, so you could infer a lot more if it's a portrait of their face. (Participant 9)

Identification and recognizability were also important for another eight participants, who said their engagement with photos showing faces was conditional. Some said they would only engage with photos where they recognized the face ("I guess it depends on who the person is. If the person was visible and recognizable, yeah, I'd engage with it more, but if not, I wouldn't" [Participant 16]), while others went a step further and said they both had to recognize the face and have a real-life connection with that person:

> I think I would engage with photos more if I knew somebody or saw their face. But, once again, if we're talking political, we have Macron or we have Obama, I don't know them personally, so I wouldn't click on or engage with their photo even though I see their face and they're familiar to me because

> that person-to-person is not there; I would scroll past that. (Participant 27)

The four participants said they weren't as likely to engage with photos showing visible faces because it increased the ambiguity of the photo and thus their curiosity.

> I would engage more with photos where the faces aren't visible. Those types of photos make you more curious. Like the Obama picture—it's too literal; whereas some of these others, I would have to stop and look at them more carefully because they're not so obvious. (Participant 17)

Watermarks and Regram Marks. The fourth question probed how the presence of identifying marks affected user engagement. Twenty participants (eight from the first factor group, seven from the second factor group, and five from the third factor group) said that the presence of watermarks and/or regram marks affected their engagement with Instagram content. Of these, 15 said such marks affected their engagement universally, while five said the marks affected their engagement only in certain circumstances.

The 15 participants who said watermarks or regram marks universally affected their engagement expressed dislike of watermarks as distracting, too formal, unnecessary, or lacking in originality.

- ***Distracting.*** "Yeah, I really don't like that. I just feel like watermarks take me away from the photos. They're kind of distracting. They seem very obtrusive and very commercial-y. I'm not super into that. I just don't like writing on photos." (Participant 21)
- ***Too formal.*** "Watermarking on Instagram is too formal. It doesn't seem very authentic. I think it loses an element of creativity when they're there." (Participant 22)
- ***Unnecessary.*** "I think Instagram watermarking is not really necessary. I have had my photos stolen on Instagram before, so I've thought about this a lot. I just don't think it's as necessary because you can definitely prove with a timestamp that you posted it first/" (Participant 4)
- ***Lacking in originality.*** "I feel like Getty Images are just like stock photos, so it kind of devalues the image. You can get that on the Internet, and it's not a photo from the creator." (Participant 29)

While almost all of the participants in this group said watermarking negatively impacted their engagement, a couple said it positively impacted it, by, for instance, increasing the photo's importance:

> I guess I'm more likely to "like" the picture if it was regrammed or watermarked, just because it subconsciously puts an importance element to it. "Oh, this is regrammed by the BBC News. It's obviously important." I'd be more likely to "like" it, number three, and then do more background research on what's going on. I think I would engage more with Getty Images just because they have good quality pictures but more the fun, entertainment side of photos. I think it's just the importance, just because it's associated with a company or title. It's like, "Oh I should probably like this because it's important." (Participant 9)

The five participants who said watermarks or regram marks affect their engagement only in certain situations said the poster's reputation and perceived ideological slant affected their engagement. In the first instance, participants said that the watermarks of certain prestigious or well-known news organizations, such as Reuters, positively impacted their engagement. "It matters whose watermark it is. If it's BBC or Reuters, I think it's more trustworthy" (Participant 30), while, in the second instance, the perceived ideological orientation of the poster affected engagement:

> I would say in a lot of these instances, watermarks don't matter; however, if it was a photo that was regrammed or had a watermark of an outlet that skewed more conservative, like Fox News, I would definitely be less likely to "like" it. (Participant 14)

The participants said organizational size also affected engagement with watermarked or regrammed content. Users said larger accounts, for example, "Probably don't need my 'like'" (Participant 10) and that

> I'm always for the little guy, so I probably would engage more with someone who has a watermark that I don't know, especially if it is a cool picture. I would look into a photo that had someone's initials watermarked on it more than I would a photo that had BBC News on it. (Participant 19)

Still Photos versus Video. The fifth and final question asked whether users engaged more with still photos or videos on Instagram. Participants (13 from the first factor group, seven from the second factor group, and six from the third factor group) overwhelmingly ($n = 26$) said they would engage with photos over video on Instagram. Their reasons included, in order of importance, (1) the time commitment required to watch videos, (2) audio concerns, (3) nostalgia for an images-only environment, and (4) that videos aren't as open to user interpretation as photos.

Time Commitment. Multiple participants said they checked Instagram while on the go or between other tasks and that videos required too long a concentrated period of engagement time.

> We're lazy and have short attention spans. Sometimes, I just want to see a photo, I like it, instead of watching the whole video. It's like I don't have a ton of time. I have to go somewhere soon, so I'll just go on Instagram and look at a few pictures. I'm not going to watch a bunch of videos. (Participant 21)

Participants also said it was easy to instantly assess whether a photo post was good or not, while a video required time to make this determination:

> When I see a picture, it's quite straightforward whether it's good or not; whether I want to look at it more or not. If it's a video and the start of it isn't very good, maybe I will miss it. (Participant 18)

Audio. Participants said that audio could be distracting to both themselves as well as others and wasn't well suited to public environments, such as classrooms, restaurants, and waiting rooms: "I also almost always have my sound off because I tend to look at my feeds at times when I probably shouldn't, so I don't want the sound to come off" (Participant 6). Another agreed: "Sometimes I don't want to turn my audio on because maybe I'm in a situation where audio is going to be distracting to myself or people around me" (Participant 11).

Nostalgia. Many of Instagram's early adopters looked back fondly on its founding years when the platform was an images-only environment. "I started Instagram like five years ago, when it was only still photos, and I'm used to that format" (Participant 17). Participants said Instagram became famous for stills, other sites are known for video, and that Instagram shouldn't diversify and should stick with what made it popular initially:

> I think a lot of other social media sites are all video now, but I still like Instagram for stills. It's weird to think of it as old-school at this point, but it kind of is. I do still appreciate a good video, but I don't want someone to be like, "Hey guys, here I am at the beach. It's a good time." I don't care about that. That's like for Snapchat. (Participant 3)

Not as Interpretive. A minority of participants preferred photos because they said videos did not give them as much interpretive freedom:

> I guess, to me, photos seem more artistic and more evocative in a way. There's more left open for interpretation; whereas, a video is more documentary. This is what happened, as opposed to still photos where you can impart meaning that you bring to the photo. I'm always going to choose a still photo and a story over a video. (Participant 15)

One participant also said Instagram's decision to show views rather than "likes" to external audiences on videos also deters people from "liking" them.

> With how it's set up on Instagram right now where it says the views, I'm not really going to go out of my way to like a video because it doesn't show how many likes a person has. I think that draws away from people liking videos. The way it shows up on the feed. (Participant 12)

Only three participants said they engaged with videos more than still photos, and one participant said he engaged with still photos and videos equally. Of the participants who engaged more with video, they said it was because the motion grabs their attention, and videos can provide more context than just the single point of view often present in a still image.

> I'm more likely to engage with videos. You get a feel of the sense of place and what else is going on behind the picture. If you take a still portrait in front of this tree outside, it's like, "OK, that's a tree," but if you have a video panning the area, you see, "Oh, this is in Central Park." You get more a sense of where they're at, what's going on around them. I like videos better. (Participant 9)

Discussion

The social media users in this study used Instagram primarily for three of the four motivations identified and refined by McQuail (1983) and McQuail, Blumler, and Brown (1972).

The first motivation was using Instagram as a platform for *integration and social interaction*. Within this category are the users from factor group one (the "feature lovers"), who use the platform to monitor their friends' and colleagues' lives or to develop and maintain parasocial relationships with aspirational figures. A 42-year-old female typified this first use ("Mostly I just like my friends' posts more than anything because I just want to show them that I see them, I'm thinking about them and their lives, as opposed to people I don't know" [Participant 15]), while a 20-year-old female who selected a portrait of former U.S. President Barack Obama as her favorite photo typified the second use ("I love President Obama. It's like I know him. I'm very fond of him and everything he's done during his presidency. I like the man he is" [Participant 20]).

The second motivation was using Instagram as a platform for information. Users from the second factor group, the "news hounds," reported using Instagram as a surveillance tool. However, in contrast to the feature lovers who used the platform to connect with identifiable users, the news hounds used Instagram's surveillance tools to monitor the global environment and keep abreast of its trends, tragedies, and conflicts. A 19-year-old self-described "politics nerd" typified this use:

> I'm probably more likely to "like" something more hard news like (photo) 9 [of the Manchester bombing] because, personally, I'm a news nerd, so that's going to be something I'm going to be tuned into and ready to interact with. (Participant 4)

The third motivation was using Instagram as a platform for entertainment. Within this category are users from the third factor group (the optimists), who described their Instagram use as diversionary, a break from problems or the routine, aesthetic enjoyment, or a way to pass time. A 43-year-old female typified the members of this group: "If something is either funny or inspiring, I'm drawn to those" (Participant 5).

Only one participant spoke of using Instagram for its *personal identity formation and maintenance* qualities. "I'm going to favor the pictures that are going to be most like me. Both of these (28 and 10) represent me" (Participant 2). This participant also highly ranked a photo of Obama (33), noting he represented Black people well and saying that's how she wants to be represented. The reason why this motivation was not as well represented as the others might be because not all identities can be visually rendered or easily translated into the visual if they concern past experience or history. Thus, more text-based social media, such as blogs or commentaries, are likely platforms that are used more for creating and maintaining one's personal identity.

Nostalgia Versus Exoticism

Although participants were exposed to photos that were familiar and relevant to their local and regional contexts, such photos did not do well compared to the distant and exotic photos in the concourse. Only two photos out of the 25 unique most- and least-engaged-with images were ones that originated within the participants' local context.

These photos (16—of the state legislature tossing papers into the air at the conclusion of a session, and 31—of an elderly female weightlifter), even though they were taken in geographic proximity of the participants, depicted generic people and situations. The lawmakers could have been from any state or country (one participant thought they were U.S. congressional representatives), and the weightlifter is not a recognizable, public figure in the community where the photo was taken. Concourse photos that clearly showed a uniquely local or regional context, including iconic architectural features present in the city or one of the state's two professional MLB teams, did not make it into the most-engaged-with category for any factor group.

As such, it seems that participants, regardless of grouping or demographics, strongly value Instagram for its boundless reach. The high number of overseas photos, as well as the depictions of exotic locales, people, and situations, is a testament to this. Participants in this sample might then be getting local content from others' platforms or at least not engaging with it on Instagram to the degree that they do with content they cannot get elsewhere.

Effect of Age on Engagement

The feature lovers and optimists groups included users from four decades, including teenagers and participants in their 20s, 30s, and 40s. In contrast, the newshounds group was younger and only included teenagers and users in their 20s. Millennials, who encompass the age range of the newshounds group, are neither print- nor even text-oriented (Scanlon, 2006). As such, Instagram as an almost purely visual news channel appeals to them uniquely in ways that are different for other (and older) users. This might explain why the concentration of users who used Instagram

for news gathering and information were located exclusively within the second and youngest factor group.

Younger users such as the Millennials in factor group two were also less likely to be enamored by or engage with content by authoritative sources, denoted most often by watermarks. One 26-year-old participant, for example, said such marks negatively impacted her engagement. "For me, seeing those watermarks made me think the photos had been altered in a way. It doesn't draw me to it. It doesn't make me think they are credible" (Participant 2). Millennials are likelier to think user-generated content is more reliable than content produced by official or bureaucratic sources. In contrast, older adults are less trusting of user-generatedcontent.

"I don't like watermarking," said one 25-year-old participant.

> It doesn't seem very authentic. It doesn't seem like it is them, and I think it loses an element of creativity when they're there. You're sharing CNN's photo. I could have seen that on CNN or with a Getty image; I could have seen that anywhere. I think of Instagram as being more a place for people to show something that is theirs or something they feel strongly about. (Participant 24)

Watermarks for the younger participants signaled to them that the photo had been edited, possibly cropped, etc., and that awareness of this postproduction editing made them more suspicious and less likely to engage.

Conclusion

In the quest to create images that will increase social media engagement, communicators should first be thinking about whom they want to engage with. Motivations for Instagram use vary, and the types of content users seek vary depending on those motivations. Social media research so far has overlooked users to focus on content while also ignoring photos in news media contexts. This research contributes to these understudied areas by (1) identifying the content with which certain users are most likely to interact and (2) providing insight on how specific content features impact this set of users. The study's initial exploration into this area suggests, for example, that people are more likely to use Instagram for its information, entertainment, and integration and social interaction functions than for its personal identity formation and maintenance function.

While most users prefer feature to news, the newsworthy or gritty aspects of life can achieve good engagement provided they are rendered in aesthetic and empowering ways. In this way, the content is more likely to attract attention, raise awareness, and allow users to engage with the content without feeling guilty for "liking" something tragic. Given that a majority of the users in this sample preferred simpler, cleaner images (often portraits or other close-up imagery), publishers should consider using Instagram's multiple photos in a single post feature to start with a simple, eye-catching image. They can include wider, more contextually rich posts as the subsequent images in the post so that users' preference for simple imagery is honored, but the opportunity for providing additional context is not lost.

Since the vast majority (more than 90%) of Instagram users are under the age of 35 (Smith, 2014), content publishers hoping to cultivate engagement on this platform should avoid using organizational watermarks, since younger individuals are suspicious of them and think user-generated content is more reliable. Additionally, since the users in this age group are more familiar, time-conscious, and comfortable interacting with still photos rather than videos, when videos are used, content publishers should devote special attention to making them accessible so that audio is not required, so that the first few seconds are highly engaging, and so viewers have room to interpret the content rather than having it spelled out to them.

Considering that many of the users in this sample grew up with Instagram as a photos-only platform, future research can be devoted to studying whether younger generations who have grown up with a format-agnostic Instagram maintain the same preference for stills that their predecessors did.

Notes

[1] SocialRank could provide analytics for no more than any account's 66 most recent posts.

[2] In the interview phase, the participant indicated a conscious practice of taking an even-handed approach to engaging with different types of photographs on Instagram.

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