A New Women's Work: Digital Interactions, Gender, and Social Network Sites

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This research explores social network site interaction through digital and gendered labor. Due to enhanced interaction possibilities as well as mining and analytic techniques, all digital interaction is labor, at both the social and institutional level. Responses to a survey (N = 455) suggest that digital labor varies depending on the most-used social network site. In addition, women test higher in agreeableness, conscientiousness, and neuroticism, and contribute statistically more emotional labor online through liking and commenting. Women describe intricate processes of deciding whether they can or should socially interact, often fearing interpersonal conflict or being told they are stupid. Men, on the other hand, view social network sites as places for entertainment and base their emotional labor on some judged entertainment value. As such, this study illuminates how social network sites function as extensions of the home. Instead of being invited to contribute new cultural products, women are frequently led to support only those that already exist, arguably creating data that contain less use value and even more exchange and surplus value than other forms of digital labor.

Keywords: digital labor, emotional labor, gender, social media, social network sites, women's work

Hidden behind the curtain of an "empowering" Internet exist the fruits of social network site (SNS) labor. In the ever-evolving digital environment, user-generated content proliferates, and methods of collecting and commoditizing these data grow as well. Against this backdrop, it is vital to recognize that SNS interactions are always labor. SNSs promote themselves as companies that care about human connection and sharing, but human tendencies to create use value through sociality are exploited to generate exchange and surplus value. Profitable interactions vastly comprise emotional labor, the expectation of which is disproportionately placed on women. As such, this study explores SNS labor and how it has created a new site of "women's work."

Responses to a survey (N = 455) reveal that women are more likely to like and comment on Facebook, Instagram, Twitter, and Snapchat content, providing valuable data. Much like traditional notions of women's work, SNSs rely on women to support their capitalistic goals. Unlike traditional notions, however,

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Date submitted: 2017-10-29

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emotional labor, which has always been expected of and conducted by women, can now be commoditized, resulting in a more direct support of capitalistic gain. This study illuminates the ways in which SNSs function as new extensions of "the home" and the "domestic tools" that came before. Instead of being invited to contribute new cultural products to society, women are frequently led to support only those that already exist, arguably creating data that contain less use value and even more exchange and surplus value than other forms of digital labor.

Findings also indicate that whereas women view SNSs as social utilities, men view them as sources of entertainment. Women explain complex scenarios of deciding when they can and should interact; men describe choosing which posts to like or comment based on their entertainment value. Although using the same SNSs, women are driven to add these tools to the extensive list of technologies for the home, whereas men see them as the opposite of work: home entertainment systems that provide an escape from traditional notions of work that exist outside the home.

Interaction

It is no secret that what it means to "use" the net has drastically changed since the time of early digital spaces such as BBSs (bulletin board systems) and MUDs (multiuser dungeons). Interaction has become much more dynamic, as have the tools to collect, measure, manipulate, and commoditize data produced by this use. Indeed, as digital companies create and employ an increasing number of digital layers—algorithms, templates, targeted ads—the notion of interaction is distorted: Users are often not intentionally or knowingly interacting with these tools. Thus, to move toward a more nuanced conception of what interaction online is today, the following sections describe two burgeoning characteristics: granularity and visibility.

Interaction Granularity

Unlike early forums where interaction was defined simply as uploading or downloading content, interaction on SNSs is constantly becoming more granular and dynamic. Within SNSs, users can post text and upload photos. They also can share news stories and entertainment content. Furthermore, users can interact by sharing, liking, or commenting on other user- or third-party-generated content.

Beyond these visible interactions that users intentionally conduct, there are multiple ways users are constantly interacting with the space itself—algorithms, pixels, targeted ads, eye trackers, mouse trackers, and so on (e.g., Gerlitz & Helmond, 2013). In sum, everything a user can do with, in, and to an SNS is some type of interaction; yet, who is privy to that interaction, and the data it creates, varies.

¹ This is illustrated through the Cambridge Analytica scandal. Facebook users who downloaded the app believed that they were simply taking a personality test. Yet, they were also unknowingly interacting with the tool by "allowing" the company to scrape both their personal profile information and that of their friends. See, for example, Rosenberg, Confessore, and Cadwalladr (2018).

Interaction Visibility

With the above in mind, it is important to recognize not just the increasing granularity of interaction possibilities, but also who can view these interactions and the data they produce. An important addition to a more thorough conception of digital interaction is not just that user interaction has become more dynamic, but also that tools are continuously created and updated to gather the data that are produced by these interactions. Although it is an ongoing, and increasingly complex, question as to who is privy to interaction data,² I attempt to elucidate by extending Raynes-Goldie's (2010) claim that there seem to be two categories of privacy on SNSs by introducing two types of interaction visibility—social interaction and institutional interaction.

Social interaction includes interactions that are visible to other users, as defined through each user's privacy settings. These include posts, photos, likes, shares, and comments. When most Internet users think of "interaction," they conjure up thoughts of social interaction, often concerned with what a potential employer or parent can see.

Institutional interaction, on the other hand, includes all interactions with and through the SNS included, but not limited to, pages viewed, time spent logged in, links clicked, eye movement patterns, and mouse placement. Institutional interaction also includes the data that accrue when users are not viewing a space's interface, such as a mobile device's current GPS coordinates or sites visited using the same mobile device or browser. Institutional interaction data are usually not shared with users, but only with employees of the platform and any third parties that may have access for research or advertising purposes.

In sum, interaction with SNSs is more dynamic than initially evident or advertised: Installed SNS apps are constantly logging interaction data, even when users have not considered their activities to be interactions. This distinction is important because, beyond highlighting the dynamic definition of interaction, it also illustrates the massive amount of data that is constantly being produced by SNS users, collected by digital companies, and commoditized.

Two examples highlight the importance of considering social and institutional interaction. First, as Golbeck (2013) elucidated, Facebook revealed through a published research report that posts are programmed to have an autosave feature. Like Google's autosave-to-draft feature, if a user begins writing a post, decides she no longer wants to socially interact, and then deletes the content, Facebook still saves the metadata that were produced. Thus, although no social interaction occurred, the user institutionally interacted.

The second example can be easily found in Facebook's data policy:

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² It was revealed that Facebook brokered data-sharing partnerships with device makers—Apple, Amazon, Microsoft, Samsung, and 60 others—that provided the companies with users' and users' friends' data, often overriding privacy settings (Dance, Confessore, & LaForgia, 2018).

To create personalized Products that are unique and relevant to you, we use your connections, preferences, interests and activities based on the data we collect and learn from you and others (including any data with special protections you choose to provide); how you use and interact with our Products; and the people, places, or things you're connected to and interested in on and off our Products. (Facebook, 2018, para. 2)

Notice that the company includes both "how you use" and "interact with" its services, because it recognizes that "using" may be viewed as social interaction and "interacting" covers all other, often invisibly collected, interaction data. Importantly, the data collected, through both social and institutional interaction, are the products of user labor that keep SNSs in business.

Labor

Much like the "work of watching" (Jhally & Livant, 1986), online users participate in the "work of being watched" (Andrejevic, 2002) through both social and institutional interaction. Whereas the work of watching refers to consumers viewing broadcast television commercials "in exchange" for entertainment content, the work of being watched highlights that users are now also the content themselves. Thus, Internet users become producers and consumers in a paradoxical cycle wherein user-generated data are collected, stored, and used to create new content that is then reflected back to digital users. Clearly, in this elision of production and consumption, what it means to "work" is highly debatable (e.g., Andrejevic et al., 2014; Deuze, 2007; Duffy, 2015).

Contending that communication research often fails to explore labor, Fuchs and Sevignani (2013) apply Marx's arguments to digital spaces. Whereas "work," they explain, transforms nature, culture, and society into goods and services for human needs, "labor" is productive consumption wherein laborers transform natural products and make some new product. In addition, this new product becomes distinct from the consumer: Work creates use value, but labor creates only value.

For any work or labor to occur, people use instruments to transform nature into a new product. In the case of sociality, work is performed when people, using language as an instrument, come together to create and share meaning. Use values are produced as broader social networks and new understandings of the world and each other. Social network sites exploit this human desire and provide new instruments—digital platforms, tools, and functionalities—that allow users to create broader social networks and to share their stories more widely (e.g., Fuchs & Sevignani, 2013). However, with these additional instruments, users perform labor as their every interaction is catalogued, analyzed, and recycled for digital conglomerate gain.

Of course, scholars have argued that using SNSs is labor (e.g., Fuchs, 2017); however, employing simple syllogism, we can deduce this to be true. As previously established, (1) if each user interaction creates data, (2) these data are saved to databases, (3) these databases then serve SNS companies' economic goals, and (4) users are never paid money for their data nor are they even privy to their personal databases, then interactions through SNSs are always labor. Some are wary of labeling digital work as labor (e.g., Hesmondhalgh, 2010), but SNSs present specific digital spaces that are materially different from

Wikipedia or Open Source programming, namely because of their policies concerning collecting and sharing social and institutional interaction data (e.g., Dance et al., 2018).³

The labor of SNS interaction is veiled because users are led to believe that free platforms "raise up" and "support" their social and identity needs (e.g., Gillespie, 2010). However, the minute they take their social and identity performances online, users become alienated from their data. Not only do they no longer own their personal data, users also do not own the process of collecting, analyzing, or repurposing those data. Indeed, it may seem like users can still access their information, but they can view only a portion of it, in the platform's terms.⁴ Unable to view, edit, or in any way control digital conglomerates' templates or databases, users are granted "access [but] not possession" (Scholz, 2014, p. 49).

This "cultural work" (e.g., Terranova, 2000) is hard to distinguish as labor because users are passionate about the content they are producing and are not primed to view their time and effort as labor (Postigo, 2009). Often referred to as *playbor* (Fuchs & Sevignani, 2013, p. 237), the labor conducted feels natural, and often fun, and thus its identity as a data commodity is hidden. In addition, SNSs promote themselves as companies that care about human connection and sharing (Fuchs & Sevignani, 2013). Instagram is the "home for visual storytelling" (Instagram, 2018), Twitter wants you to "just be you" (Twitter, 2018), Snapchat "empower[s] people to express themselves" (Snap Inc., 2018), and Facebook helps users "have more meaningful social interactions" (Zuckerberg, 2018).

Through social interaction, SNSs track who users are, with whom they spend their time, and thus content and products users most likely want to consume. Through institutional interaction, digital companies learn even more about users, even if they believe they are moving through invisibly. Digital norms such as pressing the like button or sharing a news story work to reinforce social expectations while also generating data and profits (e.g., Gerlitz & Helmond, 2013). Almost all the work that goes into SNSs is free and emotional. These are, in fact, the types of labor that make the most money (Jarrett, 2013), as well as the very acts that build social networks and databases, thus helping SNSs reach and maintain success (Duffy, 2015).

Emotional labor, according to Hochschild (1979), refers to the process of under- or overperforming emotions as a means of making others more comfortable. People apply "feeling rules," or what we should feel and expect to feel, in different situations and surrounded by specific people. Emotional labor comes alive in social exchange (Hochschild, 1979, p. 568), and power relations are an important part of these social exchanges. Performing deep emotional labor to meet the needs of others, people are less likely to draw from actual parts of the self and are more likely to just be a part of their job: "Surely the flight attendant's sense that she 'should feel cheery' does more to promote profit for United than to enhance her own inner well-being" (Hochschild, 1979, pp. 570, 573).

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³ Of course, I do not purpose that we consider SNS labor to be exploitation akin to the "appalling conditions and pay in Indonesian sweatshops" (Hesmondhalgh, 2010, p. 271).

⁴ Facebook advertises the ability to download a zip file of "your data," but the file includes only social interaction data and is therefore incomplete.

Hochschild's example of flight attendants performing emotional labor is embedded in work: The United employee is performing her paid job, while also performing certain emotions to match her work-related scenarios. Thinking of emotional labor through SNSs is a bit different. Not only are all SNS interactions labor, SNSs are built on the expectations of sociality and emotional labor. SNSs exploit the human desire to show and receive support, implicitly defining what it means to be "emotional" (e.g., Arcy, 2016). Therefore, users are guided to not only like, comment on, and share platform content, they are also pressed to collect these signs of emotional labor for themselves at the risk of becoming invisible. To complete the cycle, affirmation online associates liking with the SNS itself, leading people to spend more time where they are "liked" (Arcy, 2016).

Gendered Labor

As seen through SNSs, emotional labor must not be tied to traditional notions of work. Emotional labor is a large part of "women's work": the labor that is traditionally reserved for women, especially in the home (Hochschild, 1979). Women's work includes such tasks as cooking, cleaning, and raising children, but emotional labor is a "second shift," and this is perpetuated by SNSs (Arcy, 2016). Indeed, the expectation of emotional labor is disproportionately placed on women due to some "assumed expertise in emotional management" (Arcy, 2106, p. 1).

Fortunati (2011) argues that whereas immaterial work (e.g., emotional labor) has seen a sharp increase in technical support, material labor (e.g., cooking and cleaning) has experienced a much slower rise. Digital technologies such as computers, laptops, and smart phones are instruments of domestic labor that standardize the process of emotional support. Technologies of material women's work, such as cooking and cleaning, are created to save time (e.g., microwaves and Roombas). This free time is then expected to be filled with more care work through SNSs. SNSs directly draw from tenets of emotional labor, such as sociability and friendship, and turn their use value into exchange and surplus value (e.g., Fisher, 2012). Importantly, just as in the offline world, women are expected to be the planners and socialites through media technologies (e.g., Portwood-Stacer, 2014).

This immaterial labor is not new, however (e.g., Jarrett, 2018). Looking back to the early 20th century, for example, women were selected to be telephone switchboard operators, acting as the connecting medium between caller and recipient. Women were chosen both because the job was a low-paying one and because women were considered more capable of being kind and social. However, when men would need to speak with the operator, the telephone acted as one of the first media that broke down traditional social etiquette filters. Many women operators were considered immoral, and, until 1913, Italian women operators were required to quit their jobs if they married (Balbi, 2013).

Today, women's relationships with technologies have become even more challenging. Taking photos and routinely posting them to SNSs have become normalized through the mass adoption of mobile technologies (Goodwin, Griffin, Lyons, McCreanor, & Moewaka Barnes, 2016). The freeness of selfies and

⁵ The sorting algorithms of SNSs such as Facebook (EdgeRank) include code that places posts that receive the most "attention" or emotional labor at the top of users' news feeds (see, e.g., Bucher, 2012).

other user-generated content that spaces such as Facebook, Instagram, Snapchat, and Twitter so widely advertise are the same criteria by which society also critiques women for being too public with their interactions and performances online. Although early predictions of how women could use the Internet included expanding the breadth and depth of their knowledge and networks, stereotypes of what and where women should be are ever-present (e.g., Bailey, Steeves, Burkell, & Regan, 2013).

On one hand, scholars such as Shah (2015) relate women, technologies, and publicness with traditional definitions of women who are too "open" and thus deemed slutty. Analogous to a literal opening of a women's body, Shah argues that women's participating online, in a necessarily public environment, makes "the private self, public, and in the process renders it slutty" (p. 89). In other words, contemporary cultural norms regarding expectations of how women are to use the Internet are directly related to viewing women as immoral and sinful when they are paired with technologies that are for public use.

In contrast, Dobson (2014) argues that women actively attempt to "shamelessly self-expose" themselves. Often posting content that paints them as open, fun, wild, and "hetero-sexy" (p. 104), women use SNSs as expressive spaces that are difficult to locate in the offline world. This "agentic usage" (p. 110) has become a gendered way to perform rage (p. 111) that is still situated within stereotypically expected feminine acts.

In both of the above extremes, women are performing specific selves through SNSs that drive conglomerates' capitalistic gain. When women, as Shah (2015) explains, feel the push to only like and comment on posts for fear of seeming slutty, they are still providing SNSs with valuable emotional labor. Similarly, when women find that SNSs prove well suited for expressive, "gendered rage," they too are contributing valuable data.

This Study

Previous research has worked toward an understanding of online labor and how this labor is immaterial, unpaid, and cultural work. Studies have also attempted to understand how users from a variety of backgrounds use SNSs to connect with friends and perform identity characteristics. My goal, through exploring the gendered nature of both social and institutional interaction, is to answer calls like Eubanks' (2011), which asks for people's knowledge of their everyday experiences to be connected to the social and political realities that frame these very experiences, as well as Jarrett's (2018) appeal for studies that provide a more nuanced look into immaterial labor's relationship to capital. As such, there were two main research questions guiding this study:

RQ1: How do users interact through varied SNSs?

RQ2: In what ways are social and institutional labor gendered?

Method

Participants were recruited through courses at two universities in the northeastern United States and were compensated with extra credit points in their classes. Professors of participating courses provided their students with a link to the institutional review board-approved survey, which was hosted by Google and fielded in May 2016. Only undergraduates were included in the sample. A total of 455 students completed the online survey (see Table 1 for demographics).

Table 1. Demographics.

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Demographic	Statistic		
Gender, <i>n</i> (%)			
Female	303 (66.6)		
Male	151 (33.18)		
Other	1 (0.22)		
Mean (SD) age (years)	20.5 (2.5)		
Ethnicity, n (%)			
White	370 (81.3)		
African American	46 (10.12)		
Hispanic	19 (4.18)		
Asian	11 (2.42)		
One or more races	6 (1.32)		
Other	3 (0.66)		
Socioeconomic status, n (%)			
Working	87 (19.12)		
Middle	248 (54.51)		
Upper middle	115 (25.27		
Upper	4 (0.88)		
Other	1 (0.22)		
Most used social network site, n (%)			
Facebook	139 (30.55)		
Instagram	121 (26.59)		
Snapchat	117 (25.71)		
Twitter	61 (13.41)		
Other	17 (3.74)		

Measures

The survey included three scales to measure SNS interaction, personality, and self-esteem. The majority of the created interaction scale provided a granular measure regarding social labor, and the openended question attempted to comprehend awareness of, and reasons for, institutional interaction. Likewise, the personality and self-esteem scales provided a more granular look at user type in an effort to recognize

SNSs as more ethnocentric than infocentric (e.g., boyd & Ellison, 2007). These three measures are discussed in more detail below.

SNS Interaction Scale

The SNS Interaction Scale (Cronbach's α = .86) was created to better understand how users interact. This measure includes items that assess how certain types of posts are published, liked, commented on, and shared, and was created by cataloguing common acts through SNSs. (See Table 2 for item wording and descriptive statistics.)

Table 2. Social Network Site Interaction Scale Wording and Descriptive Statistics.

Item	Mean	SD
On average, how many hours a day do you spend on social media?	3.02	1.60
How many times a day, on average do you		
post text-based content?	1.59	1.73
post an image or video?	1.67	1.68
share a news article?	1.42	1.57
"like" a text-based post	3.14	2.04
"like" an image or video?	3.87	2.01
"like" a news article?	2.35	2.00
comment on text-based content?	1.61	1.63
comment on an image or video?	1.69	1.69
comment on a news article?	0.90	1.40

Note. Converted to ordinal numbers: 0 = <1 and 6 = >5. Thus, this measure is conservative, not fully capturing users who spend many more than five hours a day or who post, like, or comment many more than five times a day.

Participants were asked to respond to all SNS interaction items based on their most-used SNS. An additional open-ended question asked, "Why are there posts that you choose to only view and not interact with by liking or commenting?"

Personality

Personality traits have been found to predict SNS usage type. For example, Ross and colleagues (2009) found that undergraduates use Facebook for social purposes. However, contemporary usage should be viewed as multidimensional and related to personality characteristics. Users high in neuroticism, for example, prefer using the Facebook Wall, whereas users with low neuroticism prefer posting pictures. Users high in extraversion are likely to have more friends online (Amichai-Hamburger & Vinitzky, 2010), and Facebooking is more likely attractive to people who are high in extraversion and low in conscientiousness. More time spent on Facebook is positively correlated with neuroticism (Ryan & Xenos, 2011).

As such, The Big Five Personality Scale was employed to test participants on their levels of extraversion, agreeableness, conscientiousness, neuroticism, 6 and openness (Norman, 1963). A 5-point Likert scale was provided, where $1 = disagree \ strongly$ and $5 = agree \ strongly$, with $3 = neither \ agree \ nor \ disagree$. Negatively worded items were reverse coded.

Self-Esteem

No matter age, gender, social class, ethnicity, or nationality, studies have found that users with high self-esteem are more emotionally stable, extraverted, and conscientious, and thus use SNSs differently from those with lower levels of self-esteem (e.g., Bachrach, Kosinski, Graepel, Kohli, & Stillwell, 2012; Robins, Tracy, Trzesniewski, Potter, & Gosling, 2002). Krämer and Winter (2008) hypothesize that people with low self-esteem may be more likely to use SNSs because they find them helpful in raising their esteem. With previous research in mind, Rosenberg's (1965) self-esteem scale was employed. A 4-point Likert scale was provided, where 1 = strongly disagree and 4 = strongly agree.

Results

Each participant received a score for extraversion, agreeableness, conscientiousness, neuroticism, openness, and self-esteem. These scores were the sum of the responses for the related items. Similarly, the participants were also given usage scores based on how often they like, comment on, and share text, images, and news. A series of *t* tests was employed to compare the women's and men's scores.⁷ Opened-ended responses regarding why social interaction does not take place were analyzed using a grounded theory technique (Glaser & Strauss, 2009).

In line with previous studies, participants high in extraversion spent more time on SNSs as did those low in self-esteem. As expected to flow from these ethnocentric spaces, average social interaction was highest in acts such as liking a post or commenting on an image and lowest for social interactions with news content. After controlling for both gender and most-used platform, although some trends relating to SNS use, personality, self-esteem, and gender norms were confirmed across all platforms, many trends emerged that were unique to each space.

Across all platforms, women were statistically more likely to spend time on SNSs, t(330) = 4.85, p < .01. Thus, an initial, and large-scale, finding is that women necessarily conduct more institutional labor than men. In addition, no participants, in their open-ended answer, spoke about institutional interaction.

⁶ Historically, women have been considered more "neurotic" or "hysteric" by medical men as a way of deeming women unstable and in constant need of special care. This rationale was then used to "prove" that women were suited to only one social role: housewife (e.g., Poovey, 1986). I am very aware of this history, and although I have employed neuroticism as one of the Big Five to measure tendencies to be anxious or depressed, my analyses took into consideration that women may test higher in neuroticism simply because they have been culturally conditioned to believe that they are more "hysteric" than their male counterparts.

⁷ Only one participant identified as nonbinary.

Platforms and Personalities

Beyond controlling only for gender, I also controlled for most-used SNS because user labor is greatly dependent on the platform: Users specifically choose SNSs according to what tools are offered (e.g., Marwick & boyd, 2014). As Gibson (1979) argues, users and designers are in constant negotiation, working out what spaces and their tools are and should be. More contemporary scholars have shown that, depending on what digital spaces offer, users will interact differently (e.g., Cirucci, 2015; Duffy, Pruchniewska, & Scolere, 2017). Because sites offer different tools and levels of privacy, users choose SNSs based on what they want and need from a digital experience. Thus, as well as personality traits and levels of self-esteem, most-used platform can offer insight into social and institutional labor contributed.

Facebook, Twitter, Instagram, and Snapchat were the top-four platforms listed by users and subsequently the four included in this analysis. Table 3 outlines the main findings related to women's and men's usage trends, organized by most-used platform.

Table 3. Social Network Site Usage Trends by Most-Used Platform.

Variable	Women M	Men <i>M</i>	t
Facebook			
Like an image	3.79	3.11	t(112) = 1.98, p = .03
Comment on an image	1.78	1.27	t(134) = 1.84, p = .03
Instagram			
Post images	1.54	1.22	t(101) = 1.39, p = .08
Like text	3.09	2.69	t(55) = 0.95, p = .17
Like images	4.52	4.16	t(55) = 0.99, p = .16
Comment on text	1.58	1.31	t(62) = 0.86, p = .2
Twitter			
Post text	2.60	3.04	t(57) = -0.9, p = .19
Post images	1.69	1.82	t(55) = -0.3, p = .39
Like text	3.44	3.11	t(55) = 0.64, p = .26
Like images	4.13	3.64	t(57) = 0.98, p = .17
Snapchat			
Post text	2.00	1.16	t(51) = 2.48, p = .008
Post images	2.37	1.24	t(45) = 3.16, p = .001
Like text	3.61	2.12	t(39) = 3.21, p = .001
Like images	4.07	2.64	t(35) = 2.74, p = .005
Comment on text	1.98	0.76	t(55) = 3.83, p = .0001
Comment on images	1.92	0.72	t(61) = 4.08, p = .0000

Table 4 summarizes women's and men's personality and self-esteem scores, also organized by most-used platform.

Table 4. Personality and Self-Esteem Scores by Most-Used Platform.

Variable	Women M	Men <i>M</i>	t
Facebook			
Extraverted	24.71	26.98	t(118) = -2.08, p = .02
Agreeable	35.35	33.52	t(127) = 2.09, p = .02
Conscientious	32.99	21.18	t(133) = 1.91, p = .03
Neurotic	25.74	22.16	t(125) = 3.67, p = .0002
Self-esteem	18.68	21.33	t(123) = -2.68, p = .004
Instagram			
Agreeable	34.81	33.53	t(83) = 1.45, p = .08
Conscientious	31.83	30.19	t(67) = 1.72, p = .05
Neurotic	25.13	22.41	t(64) = 2.53, p = .007
Twitter			
Self-esteem	19.25	20.79	t(52) = 1.18, p = .12
Snapchat			
Extraverted	29.10	26.28	t(36) = 1.98, p = .03
Neurotic	24.33	20.48	t(40) = 3.12, p = .002
Self-esteem	19.48	22.08	t(37) = -2.22, p = .02

In general, women were more likely to contribute social interaction labor to SNSs. This labor mostly comprised emotional labor (e.g., liking and commenting) instead of contributing unique content. On Facebook, women and men added new posts and images a fairly equal amount, but women were more likely to like and comment on image-based content. On Instagram, women were slightly more likely to post images, but they also were more likely to like and comment. Women on Twitter were still more likely to like and comment on tweets, but men were more likely to contribute new text-based and image-based content. Snapchat, as the newest SNS that functions more like a messaging service than the other three platforms herein, offered a slightly different scenario. Women were statistically more likely to post text and images. However, they also were statistically more likely to provide emotional labor through liking and commenting on text and images.

To better understand relationships between platform choice and labor contributed, I also collected Big Five personality and Rosenberg self-esteem scores. On Facebook, men were more extraverted and had higher self-esteem, whereas women were more agreeable, conscientious, and neurotic. Similarly, on Instagram, women were more likely to be agreeable, conscientious, and neurotic. Men on Twitter had higher self-esteem. For those who used Snapchat most often, women were statistically more likely to be neurotic and have lower self-esteem. Interestingly, women tested statistically higher in extraversion.

Deciding When and How to Socially Interact

Across the four platforms, there was a clear distinction in how men and women decided when and how to perform emotional labor: liking and commenting. Generally, women's responses were situated in interpersonal issues. Their reasons for not liking or commenting on content were to avoid what others would think about, or do to, them. Women regularly mentioned not socially interacting because they do not know the poster well enough or because they do not get along. Men, however, rarely mentioned their interpersonal relationships with posters.

When controlling for most-used platform, a richer discussion emerged regarding how users decide when and what to socially contribute. Indeed, a detailed look into personality scores was provided. Women Facebookers described their tendencies to remain agreeable and conscientious:⁸

There are some people I follow that I do not really care for. I only keep them on to avoid conflicts. I do not wish to have more interaction with them than necessary.

Sometimes I choose not to like or comment if it is a heated issue that I do not want to be involved with.

If an issue is controversial, I avoid liking or commenting.

I am much more likely to interact on a post if it is lighthearted or humorous.

I don't want to be criticized by my "friends" for taking an opposite stance from them.

Men who use Facebook most often wrote instead about the entertainment value of posts:

Not intrigued enough to entertain the post.

Especially if the content is not great, then I won't like it or comment on it. In order for me to comment on a post the content has to be great.

[If the content is] fluffed with unnecessary detail or if it's something I simply do not like to hear about.

They are not important enough to gain a like. They do not stand out enough.

Women who use Instagram most often also explained their propensity to worry about being agreeable and conscientious. However, there was a more specific focus on the increased publicness of

⁸ All responses remain in their original form. To capture participants' contributions, the quotes were not copyedited or changed for any reason beyond clarification and truncating for the sake of brevity.

Instagram profiles as well as emotional labor contributions. These participants explained their fixation on not liking or commenting on celebrities' and popular Grammers' posts that were already viral:

Some posts that have many likes and comments are accounts that have a lot of followers due to the account being a celebrity, company, etc. I will not comment on these posts because I know that my comment will only be seen by random users.

I don't feel the need to comment on a post that is viral. I like to comment on posts with people who interact back with me, and typically with posts that are viral, they don't interact back.

Themes of attempting to remain agreeable were also present:

The post could be inappropriate to like or share.

Some posts have controversial issues that can cause arguments.

Sometimes people associate what you like online as who you are personally, which is not always the case.

I would say because most of the time there is drama or arguments that I do not feel I want to be associated with.

Men who chose Instagram as their most-used SNS again, as with Facebook, noted that they choose to not provide emotional labor because posts are not of interest to them or not worth the attention:

I don't feel the need to. It doesn't interest me.

Most of the posts that I do not like or comment are posts that do not do anything for me. I do not relate to them, think they are funny, to find them interesting.

Because some posts aren't worth me liking.

Doesn't deserve [a like or comment].

Women who selected Twitter as their most-used SNS reflected larger patterns of misogyny in online spaces, often writing that they cannot like or comment on a tweet because they are afraid they do not understand the content well enough to do so:

I don't like to comment because I don't want people to judge or think I am dumb.

I feel as though interacting in an online forum or interacting with it directly opens me up to criticism and "hate."

Although more likely to post on Twitter than women, men still are less likely to like and comment on tweets. They, again, explained that they just do not feel the need to provide emotional labor, often noting that information that is valuable may be noticed, but not if that content is too personal:

Some [tweets] have information that I find valuable or that I feel as if I need to share it with my followers.

If it is just someone commenting on their life, I am less likely to interact.

Finally, a few of the women who use Snapchat as their main SNS echoed previous sentiments regarding level of closeness with the poster:

If I'm not on a friendship level with the person, I usually won't do either [like or comment] because I don't want them to think it's weird for me to be viewing their media they post.

It could also be someone who I don't particularly like.

Although still speaking to the greater likelihood that they are anxious and have lower self-esteem than men on Snapchat, the women in this SNS group wrote less about interpersonal conflict. Some participants noted that they still do like to comment as a way of conducting emotional labor:

 $[I\ comment\ when]\ something\ .\ .\ .$ requires some motivational comments to the person posting.

And they do not want to start "drama":

It could be controversial and bring unnecessary drama. I would much rather keep my opinions to myself.

Yet, in general, Snapchatting women wrote less about the fear of interpersonal conflict and being judged. This supports the finding that Snapchat is the only platform wherein women are statistically more likely to be extraverted. The causality is, of course, unclear, but it seems that women who use Snapchat as their main SNS are either already more extraverted and therefore choose Snapchat or Snapchat itself empowers women to become more extraverted.

Men, on the other hand, explained that most of what they see on Snapchat is not worth their time, adding insight into why men are still significantly more likely to test higher in self-esteem:

I could [sic] care less what people have to say about it.

I do not feel the need to comment on or like anything.

I don't feel the need to share with people my thoughts on every little thing I see.

I think some posts are stupid and irrelevant. I do not feel the need to put myself out there for other people to see what I am doing on social media. I enjoy the entertainment, but I am not on there to entertain others.

In sum, there is a clear break between women feeling like they cannot socially interact and men, who described relaxed scenarios, choosing when they will or will not socially interact.

Discussion

Investigating usage by popular platform, while also collecting stories regarding how and why users interact, allows for a more precise understanding of interaction through SNSs and, in turn, highlights the facets of gendered, everyday digital labor.

In general, women on SNSs have lower self-esteem and are more agreeable, conscientious, and anxious about what they post, what they like, and whether they comment. Women have more mindful processes of debating whether and how they should provide emotional labor. Sometimes they feel they must and, at other times, they feel they cannot or should not. In most cases, these decisions were explained as based on fear of interpersonal conflict. Men, on the other hand, described choosing when to provide the emotional labor of liking or commenting based on their ruling of a post's entertainment value.

Beyond these general notions, however, a more nuanced view of platform labor has emerged from this study's findings. Depending on the culture of the SNS, or the platform's "affordances," distinct types of emotional labor are expected from women. Although it is, of course, likely that each participant uses additional SNSs, most-used SNSs can uncover much about how users perform emotional labor offline and the performances with which they feel most comfortable online. The diverse cultures of openness and expectation of content type help drive how women and men are expected to act within each SNS.

Women on Facebook described an emotional labor very similar to that of the second shift of women's work at home: traditional notions of keeping up with family and friends, not causing conflict, and remaining as private as possible. Instagramming women described similar feelings; however, the more public and celebrified culture of Instagram leads women to also be conscious of potential publicness and "correct" ways of interacting with viral content. Twitter is notoriously known as a male-dominated platform, and this study's findings did not deviate. Along with interpersonal conflict, women also explained that they do not like or comment on tweets because they fear they do not have enough background knowledge.

Snapchat provided a slightly different scenario. Although some women did mention concern for interpersonal conflict, it was not as widespread. This should not be surprising considering Snapchat's structure is more like a messaging app than the other three SNSs. Not only can users choose who sees which messages, the messages disappear after a designated amount of time. When compared with Facebook, Instagram, and Twitter, Snapchat feels less public. The platform is still a space ripe for emotional labor, and, as such, women are significantly more likely to like snaps. Women tested as more extraverted, but they still had lower self-esteem than their male counterparts. In other words, while conducting emotional

labor, women are less afraid to be outgoing. Although this can be viewed as encouraging at first read, on deeper reflection, it seems that women still feel most comfortable interacting when spaces are more closed.

Conclusion: A New Women's Work

All participants' open-ended responses revealed a distinct rift in how women and men envision SNSs. Women consider them social utilities that extend both the ability to emotionally support others, as well as the fear of being too public, causing conflict, or lacking proper knowledge. This finding provides evidence for Jarrett's (2013, 2018) theories regarding digital housework's gendered nature, as well as adds a digital dimension to Hochschild's (1979) original definition of emotional labor that was situated in concern for other's feelings over one's own.

This study's findings are also in line with Fortunati's (2011) description of digital tools created to allow women more time for conducting women's work within the home: Women indirectly defined SNSs as symbolic extensions of the home through which they could conduct immaterial and emotional women's work. Conversely, men almost always described SNSs as platforms for entertainment. As such, this study adds to Fortunati's work: Although both women and men use the same SNSs, women more closely relate them to other, in-home labor utilities, and men view them as analogous to television or other sources of inhome entertainment.

These findings, then, have further elucidated, as well as demonstrated the enduring significance of, the engrained stereotype that men should work outside the home and women inside the home. As such, men are guided to consider any technology used in the home as entertainment, conditioned to view home as an escape from, or even the opposite of, work. Paradoxically, because women are expected to work in the home, these same technologies represent continued sites of labor for women.

With the above in mind, I argue that through this new type of women's work—comprising everyday, digital emotional labor—women are more alienated from their digital work products than men. In general, women spend more time online, thus contributing more institutional labor. Women also are more likely, as this study displayed, to contribute emotional labor including liking and commenting. Although men do contribute more unique content, social interaction labor has proven time and again more valuable than data input directly by a user.⁹

Although certainly informed by previous studies exploring gendered, digital labor, this new type of digital women's work is a bit different. Campbell (2011), for instance, discusses the expectation that women will advertise their favorite brands to their female friends. Duffy (2016) writes about "aspirational labor" and the ways in which young women hope to "get paid to do what they love." In both instances, women are actively and directly promoting brands, products, celebrities, and themselves. In the current study, I explored how users attempt to live their daily lives online. I did not ask about promoting products or attempting to acquire sponsorships. Thus, beyond the labor that is performed to directly uphold existing companies, there exists the everyday labor of users going online, browsing, posting, and interacting with

⁹ See, for example, Meyer (2015).

content that would, at first glance, be considered mundane. This is an important distinction: Digital, quotidian labor on SNSs is arguably most essential to the success of such companies as Facebook, Instagram, Twitter, and Snapchat.

In the broader scope of digital labor, although men have the privilege of activating some agency in choosing when to interact, much of this effort is futile, given that their "silence" still produces valuable institutional labor. As Gillespie (2010) outlines, "platforms" often give the illusion of agency in the interaction process. Perhaps the most visible evidence of this is Facebook's "Only Me" social privacy setting. Users can share a news story on their Timeline or go back to an old photo album and choose "Only Me" as the audience. At the social interaction level, "Only Me" rings true: No other users can view this content. However, at the institutional level, it is not "just you." It is also, of course, Facebook and other parties or technologies that have access to their databases.

Indeed, an important finding emerged in how participants responded to the open-ended question. The survey never mentioned the terms *social interaction* and *institutional interaction*, nor was the word *labor* included. The word *interaction* was used, and participants defined this act for themselves. Every user, indirectly, defined *interaction* to mean only social interaction. No participants commented that they considered institutional interaction or communicated a realization that interacting can occur at more than the social level.

Instead of thinking about SNSs only as spaces purely for identity performance, it is also fruitful to remember that SNSs are companies. SNSs are structures that are fundamentally built to privilege their databases (Manovich, 1999) and, as such, construct users as commodities. User interfaces are designed to elicit interactions (both social and institutional) that are beneficial to advertising (Shepherd, 2014). Yet, these unique makeups of tools and functionalities also drive user labor and conceptions of sociocultural reality (e.g., Cirucci, 2017).

While continued work is needed, it is clear from this study that one sweeping view of SNSs is not sufficient to understand the complexities of user labor that is contributed across the social media landscape. Although, from this study's detailed responses, we can begin to construct a more exhaustive comprehension of SNS labor, mundane practices, and gendered contributions, more work is needed to explore SNS affordances, the diverse experiences and expectations of publicness, and the related data contributed through user labor. In addition, this study failed to collect data that could shed considerable light on how much users think about, and understand, institutional labor. Future studies should work to uncover how aware of institutional interaction users are and whether these conceptions, or lack thereof, have implications for usage norms and sociocultural expectations.

Other limitations include the age and ethnicity of participants. Most participants were White, and all participants were undergraduates from the northeastern United States. Future studies should include more diverse participants as well as other social media and SNSs. Although not a widely generalizable study, the above findings offer a small snapshot of SNS use with the hopes of continued work into exploring digital labor, everyday interactions, and this new form of women's work.

References

- Amichai-Hamburger, Y., & Vinitzky, G. (2010). Social network use and personality. *Computers in Human Behavior*, 26(6), 1289–1295.
- Andrejevic, M. (2002). The work of being watched: Interactive media and the exploitation of self-disclosure. *Critical Studies in Media Communication*, 19(2), 230–248.
- Andrejevic, M., Banks, J., Campbell, J.E., Couldry, N., Fish, A., Hearn, A., & Ouellette, L. (2014).

 Participations: Dialogues on the participatory promise of contemporary culture and Politics. *International Journal of Communication, 8,* 1089–1106.
- Arcy, J. (2016). Emotion work: Considering gender in digital labor. *Feminist Media Studies, 16*(2), 365–368.
- Bachrach, Y., Kosinski, M., Graepel, T., Kohli, P., & Stillwell, D. (2012). Personality and patterns of Facebook usage. In *Proceedings of the Fourth Annual ACM Web Science Conference* (pp. 24–32). New York, NY: Association for Computing Machinery.
- Bailey, J., Steeves, V., Burkell, J., & Regan, P. (2013). Negotiating with gender stereotypes on social networking sites: From "bicycle face" to Facebook. *Journal of Communication Inquiry, 37*(2), 91–112. doi:10.1177/0196859912473777
- Balbi, G. (2013). "I will answer you, my friend, but I am afraid": Telephones and the fear of a new medium in nineteenth- and early twentieth-century Italy. In S. Nicholas & T. O'Malley (Eds.), *The media, social fears and moral panics: Historical perspectives* (pp. 60–75). New York, NY: Routledge.
- boyd, d., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210–230.
- Bucher, T. (2012). Want to be on the top? Algorithmic power and the threat of invisibility on Facebook. New Media & Society, 14(7), 1164–1180.
- Campbell, J. E. (2011). It takes an iVillage: Gender, labor, and community in the age of television— Internet convergence. *International Journal of Communication, 5*. Retrieved from http://ijoc.org/index.php/ijoc/article/view/531
- Cirucci, A. M. (2015, July). Facebook's affordances, visible culture, and anti-anonymity. In *Proceedings of the 2015 International Conference on Social Media & Society* (p. 11). New York, NY: Association for Computing Machinery.

- Cirucci, A. M. (2017). Normative interfaces: Affordances, gender, and race in Facebook. *Social Media + Society*, 3(2). doi:10.1177/2056305117717905
- Dance, G. J. X., Confessore, N., & LaForgia, M. (2018, June 3). Facebook gave device makers deep access to data on users and friends. *The New York Times*. Retrieved from https://www.nytimes.com/interactive/2018/06/03/technology/facebook-device-partners-users-friends-data.html
- Deuze, M. (2007). Convergence culture in the creative industries. *International Journal of Cultural Studies*, 10(2), 243-263.
- Dobson, A. S. (2014). Performative shamelessness on young women's social network sites: Shielding the self and resisting gender melancholia. *Feminism & Psychology*, 24(1), 97–114.
- Duffy, B. (2015). Amateur, autonomous, and collaborative: Myths of aspiring female cultural producers in Web 2.0. *Critical Studies in Media Communication*, *32*(1), 48–64.
- Duffy, B. E. (2016). The romance of work: Gender and aspirational labour in the digital culture industries. *International Journal of Cultural Studies, 19*(4), 441–457.
- Duffy, B. E., Pruchniewska, U., & Scolere, L. (2017, July). Platform-specific self-branding: Imagined affordances of the social media ecology. In *Proceedings of the 2015 International Conference on Social Media & Society*. doi:10.1145/2789187
- Eubanks, V. (2011). Digital dead end: Fighting for social justice in the information age. Cambridge, MA: MIT Press.
- Facebook. (2018). How do we use this information? Retrieved from https://www.facebook.com/policy.php
- Fisher, E. (2012). How less alienation creates more exploitation? Audience labour on social network sites. tripleC: Communication, Capitalism & Critique, 10(2), 171–183.
- Fortunati, L. (2011). ICTs and immaterial labor from a feminist perspective. *Journal of Communication Inquiry*, *35*(4), 426–432.
- Fuchs, C. (2017). Social media: A critical introduction (2nd ed.). Los Angeles, CA: SAGE Publications.
- Fuchs, C., & Sevignani, S. (2013). What is digital labour? What is digital work? What's their difference? And why do these questions matter for understanding social media? *tripleC: Communication, Capitalism & Critique, 11*(2), 237–293.
- Gerlitz, C., & Helmond, A. (2013). The like economy: Social buttons and the data-intensive Web. *New Media & Society*, 15(8), 1348–1365.

- Gibson, J. J. (1979). The ecological approach to visual perception. Boston, MA: Houghton Mifflin.
- Gillespie, T. (2010). The politics of "platforms." New Media & Society, 12(3), 347-364.
- Glaser, B. G., & Strauss, A. L. (2009). *The discovery of grounded theory: Strategies for qualitative research.* Piscataway, NJ: Transaction Publishers.
- Golbeck, J. (2013, December). Facebook wants to know why you didn't publish that status update you started writing. *Slate*. Retrieved from http://www.slate.com/articles/technology/future_tense/2013/12/facebook_self_censorship_what _happens_to_the_posts_you_don_t_publish.html
- Goodwin, I., Griffin, C., Lyons, A., McCreanor, T., & Moewaka Barnes, H. (2016). Precarious popularity: Facebook drinking photos, the attention economy, and the regime of the branded self. *Social Media + Society*, *2*(1). doi:2056305116628889
- Hesmondhalgh, D. (2010). User-generated content, free labour and the cultural industries. *Ephemera*, 10(3/4), 267–284.
- Hochschild, A. R. (1979). Emotion work, feeling rules, and social structure. *American Journal of Sociology*, 85(3), 551–575.
- Instagram. (2018). About us. Retrieved from https://www.instagram.com/about/us/
- Jarrett, K. (2013). The relevance of "women's work": Social reproduction and immaterial labour in digital media. *Television and New Media*, 15(1), 14–29.
- Jarrett, K. (2018). Laundering women's history: A feminist critique of the social factory. *First Monday,* 23(3). doi:10.5210/fm.v23i3.8280
- Jhally, S., & Livant, B. (1986). Watching as working: The valorization of audience consciousness. *Journal of Communication*, *36*(3), 124–143.
- Krämer, N. C., & Winter, S. (2008). Impression management 2.0: The relationship of self-esteem, extraversion, self-efficacy, and self-presentation within social networking sites. *Journal of Media Psychology*, 20(3), 106–116.
- Manovich, L. (1999). Database as symbolic form. *Convergence*, 5(2), 80–99.
- Marwick, A. E., & boyd, d. (2014). Networked privacy: How teenagers negotiate context in social media. *New Media & Society, 16*(7), 1051–1067.

- Meyer, R. (2015, September). Could a bank deny your loan based on your Facebook friends? *The Atlantic*. Retrieved from https://www.theatlantic.com/technology/archive/2015/09/facebooks-new-patent-and-digital-redlining/407287/
- Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology*, 66(6), 574–583.
- Poovey, M. (1986). "Scenes of an indelicate character": The medical "treatment" of Victorian women. *Representations*, (14), 137–168.
- Portwood-Stacer, L. (2014, March). *Care work and the stakes of social media refusal.* Retrieved from http://www.newcriticals.com/care-work-and-the-stakes-of-social-media-refusal
- Postigo, H. (2009). American online volunteers: Lessons from an early co-production community. International Journal of Cultural Studies, 12, 451–469.
- Raynes-Goldie, K. (2010, January 4). Aliases, creeping, and wall cleaning: Understanding privacy in the age of Facebook. *First Monday, 15*(1). Retrieved from http://firstmonday.org/article/view/2775/2432
- Robins, R. W., Trzesniewski, K. H., Tracy, J. L., Gosling, S. D., & Potter, J. (2002). Global self-esteem across the life span. *Psychology and Aging*, *17*(3), 423–434.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Rosenberg, M., Confessore, N., & Cadwalladr, C. (2018, March 17). How Trump consultants exploited the Facebook data of millions. *The New York Times*. Retrieved from https://www.nytimes.com/2018/03/17/us/politics/cambridge-analytica-trump-campaign.html
- Ross, C., Orr, E. S., Sisic, M., Arseneault, J. M., Simmering, M. G., & Orr, R. R. (2009). Personality and motivations associated with Facebook use. *Computers in Human Behavior*, *25*(2), 578–586.
- Ryan, T., & Xenos, S. (2011). Who uses Facebook? An investigation into the relationship between the Big Five, shyness, narcissism, loneliness, and Facebook usage. *Computers in Human Behavior*, *27*(5), 1658–1664.
- Scholz, T. (2014). Platform cooperativism vs. the sharing economy. In N. Douay & A. Wan (Eds.), *Big data & civic engagement* (pp. 47–53). Rome, Italy: Planum.
- Shah, N. (2015, April 25). The selfie and the slut: Bodies, technology and public shame. *Economic & Political Weekly*, *50*(17).

Shepherd, T. (2014). Gendering the commodity audience in social media. In C. Carter, L. Steiner, & L. McLaughlin (Eds.), *The Routledge companion to media and gender* (pp. 157–167). New York, NY: Routledge.

Snap Inc. (2018). Snap. Retrieved from https://www.snap.com/en-US/

Terranova, T. (2000). Free labor: Producing culture for the digital economy. Social Text, 18(2), 33-58.

Twitter. (2018). Our culture. Retrieved from https://about.twitter.com/en_us/company/our-culture.html

Zuckerberg, M. (2018, January 11). *Facebook*. Retrieved from https://www.facebook.com/zuck/posts/10104413015393571