The critical effect:
Exploring the influence of critical media literacy pedagogy on college students' social media behaviors and attitudes

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ABSTRACT

This self-exploratory pilot qualitative study examines the impact of critical social media pedagogy on students' behavior and attitudes toward social media. This study employs a critical lens of course content and self-reported student data from 18 participants who completed a Northern California university course titled "Social Media, Social Change" in the fall of 2019. The changes in participants' social media behaviors and attitudes were measured via a pre-and post-survey designed by the researcher. Exposure to critical pedagogy was associated with changing views of social media, especially heightened privacy concerns. The study reveals areas of further research and recommendations for educators to effectively teach critical media literacy.

Keywords: *critical media literacy, social media, higher education, professional development, media effects.*

INTRODUCTION

For over a decade, scholars have been concerned about the influence of social media content on users' attitudes and behaviors (Aalbers, et al. 2019; Kim & Ko, 2010). Social media refer to "online tools where content, opinions, perspectives, insights, and media can be shared" (Nair, 2011, p. 45). Used by 3.5 billion people daily, social media are a dominant mode of 21st century communication (Hamouda, 2018). In fact, the U.S. Bureau of Labor Statistics (2019) reported that only sleeping and television consume more of users' time than social media.

Studies on social media have largely focused on the affordances and threats posed to users. As danah boyd (2015) notes, the scholarship concerning the affordances of social media has highlighted the ways in which "social media helped engineers, entrepreneurs, and everyday people reimagine the role that technology could play in information dissemination, community development, and communication" (p. 1). In addition to the affordances, scholars have also assessed the negative aspects of social media: amplification of racism and other bigotries, screen addiction, the legitimization of false information, cyber-bullying, security issues, privacy, dangers to user health, drug and alcohol addiction, defamation, scams, and fraud (boyd, 2012; Gantt Shafer, 2017; Jain, 2016). Much of the pre-2016 scholarship on social media centered on research that lauded social media's liberating potential Castells, 2015; Jenkins, 2009). Indeed, scholars citing the Arab Spring (Castells, 2015) and the rise of participatory culture (Jenkins & Ito, 2015) demonstrated great optimism about the affordances of social media. Alternatively, critical scholars claimed that discourses around digital affordances distracted from the ways in which industry uses social media and other digital platforms to perpetuate inequities of class, gender, and race (Eubanks, 2018; Noble, 2018). Their research illuminated the exploitative properties (Fuchs & Sandoval, 2013; Trottier & Fuchs, 2014) and negative influences of social media (Boyd & Ellison, 2007).

Following the 2016 elections in the U.S. and United Kingdom and violent events such as the Unite the Right rally in Charlottesville, Virginia in 2017, more attention was paid to the critical scholarship analyzing social media's negative influence on users' behavior and attitudes (Higdon, 2020). One such study was Zuboff's (2019) seminal work *The Age Of Surveillance Capitalism*, which argues that social media companies have successfully convinced users that social media use

is "free," when in fact access to these platforms comes at the expense of users' privacy in the form of data. Social media companies collect, analyze, and operationalize users' data to predict and direct their behavior. Other scholars have warned that the datafication of the economy is already reshaping our politics (Susskind, 2018), government programs (Eubanks, 2018), work-places (Ravenelle, 2019), policing (Ferguson, 2019), and education system (Williamson, 2017) in problematic ways.

Concerns about the influence of social media content on users' behavior engendered national debates about social media platforms expressed in congressional hearings about social media (McNamee, 2019; Shane, 2017), local policy debates concerning the addition of media literacy in schools (Higdon & Boyington, 2019), the tech-industry's decision to ban select content (Higdon, 2020), and the lists of false and legitimate news outlets created by scholars and new ventures such as NewsGuard (Higdon & Boyington, 2019; Lazer et al., 2018). Much of the discourse focused on the weaponization of data (Higdon, 2020). In the midst of the public outcry, research showed that young people are concerned about the collection and utilization of data, but feel a "sense of powerlessness" in trying to address or mitigate it (Pangrazio & Selwyn, 2018, p.7).

Media literacy scholars contend that a media literacy education can empower users to benefit from the affordances of social media, while mitigating the more malignant influences of content (Daneels & Vanwynsberghe, 2017; Higdon, 2020; Higdon & Huff, 2019; Vraga & Tully, 2019). However, there has been a dearth of empirical studies on the influence of media literacy education on students' social media habits. The available studies have narrowly positioned media literacy as an intervention for select mental and physical health concerns (Cavallo, et al. 2012; Livingston, et al. 2014). However, there has yet to be a study that looks more broadly at the influence of media literacy education on students' behavior and attitudes toward social media.

This self-exploratory pilot qualitative study attempts to add clarity regarding the pedagogical impact of a critical approach to social media literacy in a higher education classroom on students' behaviors and attitudes toward social media. The larger goal of this research is to inform practitioners about choosing a pedagogical approach to social study represents a beginning step in achieving that goal. It analyzes the outcomes of using critical media literacy as an intervention for youth's media literacy habits. The

study's design and findings act as a pilot for a much larger study of youth's social media habits before and after a critical pedagogy on social media.

LITERATURE REVIEW

Starting in 1993, the foundational U.S. definition of media literacy is told as "the ability to access, analyze, evaluate, create, and act using all forms of communication." (Aufderheide, 1993, p. 6). Different approaches to teaching media literacy were developed through decades of scholarship seeking to inoculate participants against the harmful effects of media, to delineate positive media from negative media, and explore the fluid nature of meaning in media texts Hobbs & Coiro, 2018; Potter, 2010). There are four currently accepted approaches to media literacy: protectionist, media arts education, the media literacy movement, and critical media literacy (Hobbs & Coiro, 2018; Hobbs & McGee, 2014; Kellner & Share, 2007; Potter, 2010). The first three, although concurrent and conflicting at times, represent critical approaches to media literacy (Higdon, et al. 2021).

Critical media literacy (CML) developed outside of the previous lineage. CML draws its theoretical concepts from the wider and considerably deeper realms of critical theory and cultural studies, such as the Frankfurt and Birmingham Schools (Kellner & Share, 2019). Critical scholars contend that a critical framework offers a more complete and robust approach to media literacy. A critical scholar would disagree, arguing that it amounts to a form of indoctrination masked as education (Hobbs, 1998). Critical scholars counter that a critical approach introduces dominant ideology as neutrality (Kellner & Share, 2019). They advocate for media literacy practitioners to adopt a critical approach to education, one that forces educators and students to engage with the ways in which identity and power influence the production, dissemination, and interpretation of media (Kellner & Share, 2019).

Traditionally, the addition of 'critical' to describe the work of media literacy refers to a style of processing the political economy of media; explores how ideology, power, and sociocultural context shape media messages and representations; and asks participants to engage in a continuous process of critical inquiry (Kellner & Share, 2019). Critical media literacy emerged in the 1990s from the study of critical theory and cultural studies (Kellner & Share, 2019). It draws its educational approach primarily from critical pedagogy, a field that emerged from the work of Brazilian educator Paulo Freire

(Kellner & Share, 2009). Critical scholars argue that a critical approach empowers autonomous media users and promotes equity in their media usage and production (Kellner & Share, 2019).

The scholarship on applying media literacy to social media is scant. Only recently did Livingstone (2014) introduce "the notion of social media literacy" (p. 1). Research has been conducted about the ways in which scholars, undergraduate students, and graduate students use social media (Carpenter & Harvey, 2019; Greenhow et al. 2019; Kimmons, et al. 2018; Romero-Hall, 2017). However, these studies reveal more about communication practices rather than pedagogical effects. In fact, the studies concerning social media education have largely debated if the social media platforms themselves are effective pedagogical tools (Boyd, 2017; Burnett & Merchant, 2011; Greenhalgh, et al. 2020; Krutka & Carpenter, 2016; Manca & Ranieri, 2016). What is missing from the literature is an analysis about the effects that media literacy has on students' behaviors and attitudes toward social media. This study investigates the influence of one approach, the critical media literacy approach, on students' behaviors and attitudes toward social media.

METHODOLOGY AND FRAMEWORK

This self-exploratory pilot qualitative study examines the impact of critical social media pedagogy on participants' behavior and attitudes toward social media. This study employs a critical lens of course content and students' self-reported behaviors and attitudes to understand the influence of critical media literacy pedagogy on students' social media habits. The study centers on exploring education as a counter-balance to the power of social media. A critical lens centers on power to allow for further exploration of racial, gendered, class, and sexual dynamics that shape power relations in the U.S. (Kellner & Sahre, 2019).

The data for this study were collected from pre- and post-surveys that recorded participants' self-reported attitudes and behaviors concerning social media. The participants in this study were students enrolled in a Northern California university semester length course titled "Social Media, Social Change" in the fall of 2019. The 16-week course employed a critical approach to education. Following Freirean pedagogy (1970), the course was discussion based, relying on student voice, along with interpretation and analysis of a diverse array of media texts including documentaries, books, news articles, and online content. The main course text, *Social*

Media: A Critical Introduction by Christian Fuchs, introduced participants to critical frameworks that were applied to social media. The first six weeks focused on introducing students to critical theory and the academic literature on social media. The learning content emphasized communication power as it relates to social movements and civil liberties issues such as privacy and surveillance. The next six weeks were dedicated to applying the critical frameworks discussed in the first part of the class to Facebook, Google, Twitter, Uber, Weibo, Wikipedia, and AirBnB. The final four weeks focused on the future of social media and other possibilities for structuring social media platforms. The course required participants to respond to a prompt on that week's learning content. During the class meeting, participants were assigned groups where they discussed their responses to the prompt. Afterwards, they would share the findings from their discussion with the class. Participants were individually evaluated on their knowledge of content, participation, and application of content to the discussion. In addition, participants completed a critical book review of a recently published academic text on social media and two written exams that asked them to make an argument based off of the course learning content.

Participants were administered a pre-and post-survey designed by the researcher to determine their behavior and attitudes in regards to social media (see Appendix). The questions spoke to some of the themes covered in the course: social media addiction, data collection and privacy, social media as a form of labor, and the perceived affordances and negative aspects of social media use. The pre-survey was given the first day of class, and the post-survey was distributed during the last week of the course. Out of the 26 participants enrolled in the course, 18 chose to complete the optional survey (69% response rate).

I collected demographic data in order to more accurately describe the sample of people in the study. The demographic information was categorized based on the participants' responses (see Figure 1 and 2). The study's racial and ethnic categories do not reflect the participant's words verbatim. For example, if a participant defined themselves as Hispanic, they were added to the Latinx category. If a participant defined their racial/ethnic identity as Native American and Black, they were counted as "mixed race." None of the demographic data was analyzed to make inferences about the relationship between identity and the survey responses. For one thing, the sample size is too small, and secondly, the relationship between identity and the

survey responses is not the focus of this study. However, given that this is an exploratory study, the demographic data was seen as a potentially useful starting point for subsequent researchers to consider.
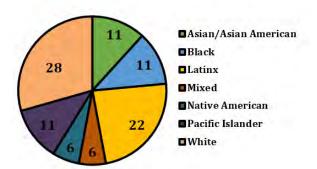

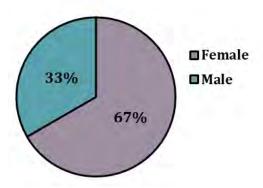Figure 1. *Participants self-reported racial identity data* (*n* = 18)

Figure 2. *Participants self-reported gender identity data* (*n* = 18)

Qualitative data went through two cycles of coding. During the first cycle of coding, I employed descriptive coding which provided topics for indexing and categorizing (Miles, et al. 2014). After the first cycle of coding, I generated 315 codes from the surveys. During the second cycle of coding, I employed pattern coding to categorize the codes into themes: the value of social media, the negative aspects of social media, privacy and surveillance, and contradictory attitudes toward social media. The themes were then analyzed and combined into four key findings.

Limitations

Given that this is a self-exploratory study, there are limitations. First, it is a small sample size composed of voluntary participants. This is acceptable for an exploratory investigation, but a potential limitation of using voluntary participants is that volunteers are often more invested in the experience and more open to

change. Furthermore, there is always a tricky power dynamic associated with students assessing and reporting their own behaviors and attitudes. However, given that the students did not know what was being surveyed or that it had any relation to studying the course's effectiveness, the results are worth considering.

FINDINGS

Upon completion of the course, participants reported having a more broad understanding of social media and a greater awareness of the negative aspects regarding social media platforms than they had prior to the course. However, the survey found no evidence that this led to a substantial decrease in social media use or reduction in active social media accounts. The amount of active social media accounts was one of the tools used to determine how participants' social media use changed throughout the course. Although the amount of active accounts increased for one-third of participants (see Figure 3), social media use remained stagnant (see Figure 4).
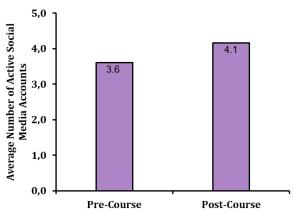
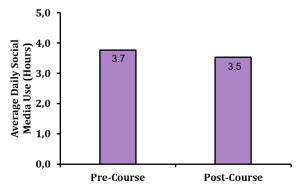Figure 3. *Overview of participants' active social media accounts*

Figure 4. *Overview of participants' self-reported daily social media use*

The findings seem to indicate that as participants developed a more broad definition of social media through course participation, they began to categorize platforms that they previously did not consider to be social media (on the pre-survey) as social media platforms (on the post-survey). However, despite the addition of new platforms, their self-reported social media use remained the same or decreased.

The survey data revealed that participants reported more positive attributes of social media on their pre-survey, than they did on their post-survey (see Figure 5).
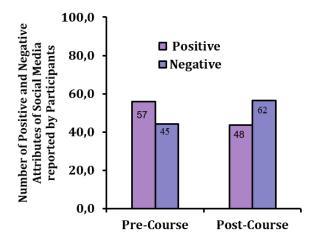
Figure 5. *Overview of participants' self-reported negative and positive attributes of social media*

Indeed, participants not only listed more negative attributes on their post-survey as compared to their pre-survey responses-more than a 25% increase—but they also reported a reduction in affordances of social media. In their post-survey results, participants argued that the negative aspects of social media were easier to identify than the affordances. They reported that the "negatives are easy, "Social media in my opinion has more negatives than positives," and "The negatives definitely outweigh the positives." Collectively, these statements point to the ways in which critical media literacy education is associated with users' increased awareness of the negative attributes of social media and renegotiation of their affordances.

Finding 1: Participant value social media as a tool for communication, marketing, and entertainment

Participants reported that they valued the communicative, entertainment, and marketing aspects of social media. Findings concerning the affordances mirrored the findings of Jain (2016). On both the pre- and post-surveys, participants cited communication as

the most valuable aspect of social media because its connective properties benefit individuals and larger society. Interestingly, on the pre-survey many participants reported that they valued the entertainment and commercial opportunities of social media, but with the exception of one participant in the post-survey, the market utility was no longer viewed as an affordance by participants who completed the course.

Participants emphasized the market utility, including branding opportunities, as an affordance of social media. Five participants discussed branding in their pre-surveys. They recognized the utility of branding; one student remarked, social media was "very useful when it comes to marketing and branding." Another student noted that they preferred Instagram because it enabled them to follow the brands they liked. However, what they believed they derived from this process or why they found value in it was not clear from the data.

On the pre-survey, participants valued the entertaining content on social media because it gave them something to do with their time. A student stated, "I think for the most part I enjoy the entertainment aspect of social media, it gives me something to do when there's nothing to do." However, why participants felt they needed to do something and if that required a screened activity was not clear. Nor was the data clear on how they defined "nothing to do."

On the pre-survey, participants valued social media because it enabled them to communicate with family and loved ones. For example, two participants noted that it enabled them to stay in touch with family that lived far away. One explained, "It is an easy way of keeping in contact with friends or family that either do not have a cell phone but have internet, or if they live in another country." Indeed, over 60 percent of participants appreciated the ease and speed of communication offered by social media. A student noted, "Social media platforms allow for easy and instant communication, no matter where you are geographically."

On the pre-survey, participants reported that they valued social media because it served an innate desire to communicate. One student explained, "I think it makes us, as humans, fulfill the attention we were looking for. I've seen a lot of people become friends from social media whether they are in the same state or in another country." Another student explained, "The positives of using social media is when you post-a picture, a lot of people like your picture and comment about either your looks or outfit which makes people feel better about themselves." Participants reported that this communication left them feeling more connected to

people. One student described, "I definitely feel more connected to my family, friends, and random celebrities and influencers that I've never met in real life."

Participants believed that social media communication was not only beneficial to the user, but society as a whole. They argued that society benefits from discourses comprised of diverse ideas and perspectives, and social media provided space to engage in crucial dialogue. One student explicated, "It allows people to be able to step out of the communications bubble they have been put in and see and experience perspectives they would have otherwise never seen." Participants reported confidence in social media being used as a tool to raise awareness about pressing issues and expose malfeasance. For example, one student clarified, "if someone posts a video of a racist person or someone committing a wrongful act, everyone works together to find that person and makes sure that their job and school know what they did or said. Social media can really help people come together." In addition to personal connections, participants reported that communication on social media benefits society by creating more informed users who can "see breaking news without having to watch the TV" and create and share "how to" guides that help solve crucial problems. One student explained that "I don't think I would ever have the time to read a newspaper or watch an entire presidential debate, so I rely on summaries and short clips to learn about what's going on in the world."

Remarkably, the post-survey results reveal a series of important contradictions. Many of the same benefits cited in the pre-survey data – communication, filling time, and branding – were associated with the negative attributes on the post-survey as described in Finding 2. This demonstrates the messy series of contradictions that confront social media users.

Finding 2: Participants tend to see bullying, predators, mental health hardships, and wasting time as negative aspects of social media use

The connection brought about by social media, and lauded by the participants in the pre-survey, helped create what participants saw as the negative aspects of social media. Despite citing social media as a communication tool for bringing people together, participants reported that it caused bullying and predatory behavior. Similarly, participants claimed that the communicative aspects of social media were beneficial to users and society, but believed it caused mental health issues in users. Finally, while participants

reported that social media's utility for filling empty time was affordance, counterintuitively, half the participants also cited wasting time as a negative aspect of social media.

Participants thought that social media had a detrimental effect on mental health. They reported that the manufactured depiction of people on social media caused mental health issues like low-self-esteem. One student reported, "unrealistic expectations from famous people or Instagram models creates depression, anxiety, and negative body image for a user." Another noted that these negative aspects impact different groups in different ways. They explained that social media use leads to low self-esteem and that "mainly women lose self-love."

Furthermore, participants believed that social media empowers cyber-bullies and predators to create offline threats to users. One student conveyed, "The most negative thing about social media has to be the amount of bullying. Anyone can comment and message someone the most hateful things and they are protected." Bullying, which nearly half of the participants cited as a negative aspect of social media, was connected to the concept of screen bravery by two other participants. They noted that social media promotes screen bravery, where people will share content and views they are too cowardly to share in face-to-face communication. One student noted, "I believe social media makes it easier for people to spread hate while hiding behind a computer." Similarly, another student explained that "There are also a lot of people getting bullied online now, because someone would rather say it online than to their face." Another student noted that "One negative of using social media is cyberbullying. It is now convenient to bully someone through the internet instead of doing it face-to-face."

About half the participants reported that social media wastes users' time. They reported that this led to a less productive lifestyle at the expense of interpersonal interaction. Two participants reported that prolonged use resulted from the "addictive" nature of social media. One student explained that people use it so much that they "lose focus on what really is important." Another student expounded, "I have spent hours on Facebook and Instagram just scrolling through people's feeds. Afterwards, I have usually felt as if it was a waste of time." They reported that the impact of social media on face-to-face communication was that it desensitizes users, and promotes anti-social and attention seeking behavior. One of the negative aspects of social media that most concerned participants was privacy.

Finding 3: Critical media literacy education changes privacy concerns

In the post-survey, participants noted the same negative aspects as the pre-survey like wasting time, bullying, and antisocial behavior, but they also demonstrated concern over the threats to privacy posed by social media use. In both surveys, participants noted a concern with data collection. However, in the pre-survey only five participants referenced surveillance and privacy as a concern compared to 16 in the post-survey.

In the post-survey, more participants demonstrated a concern for privacy in comparison to the pre-survey. For example, one student explained that "Some of the negatives of social media are data collection, targeted advertisements for commodification, zero privacy, surveillance, and exploitation." In relation, another student explicated, "Another thing that I believe is a negative of social media, is the fact that people put way too much of their personal or useless information." A third student explained, "Some negative things about social media is that it is perpetual. You cannot erase anything you have posted and people can use that against you." Finally, a student shared, "what we think are just for our friends could easily be seen by others as well. In other words, that picture where you were drunk at your party could have been posted online and seen by your upcoming employer."

Participants reported concern about their privacy being invaded and their data exploited by governments and corporations. One student noted that social media was "a way for major corporations to generate revenue through the commodification of our data and time." Another said that social media companies "exploit their users' data into a commodity." A third student expressed dismay over the intrusion of privacy that they attacked social media companies for having "sleazy terms and agreements that allow companies to keep anything and everything from you." Additionally, a fourth student shared that the exploitation of "data is a major concern, companies are selling our data and breaching our privacy to make profits." Not only were participants concerned with corporations harvesting data, participants reported concerns over government spying as well. One student noted that "social media has become a tool for the government to spy and manipulate us."

After completing the course, the participants reported viewing social media companies' dependence on data collection as being responsible for the invasion of user privacy. In the pre-test, 14 of the 18 participants

expressed concern over data collection, and that number increased to 15 in the post-survey. Not only was there a collective uniformity of concern amongst participants, there was agreement in their reasons for that concern. Their reasons included identity theft, economic losses, manipulative advertisements, and exploitation from the government. One student expressed concern over the lack of transparency concerning data collection, "It makes me concerned that companies are collecting my data without truly letting me or any of their users know about it. I am not quite familiar with what exactly their purpose is in doing so. However, the more I hear about it the more I wonder why aren't we being told to what extent companies use our information?" Participants also expressed mixed feelings about data collection. One student confided, "I am concerned because of the fact that companies easily do what they please with your information whether you're aware of it or not, what they do with that data sort of concerns me because I don't truly understand the harms/consequences of it." Despite this concern that student noted, "At the same time, I don't care because I have nothing to hide. It kind of like I have nothing to lose or hide therefore it doesn't bother me even if it is intrusive."

Participants did report a connection between the course and their awareness and concern with data collection. One student noted: "After taking this class I am more concerned about risks that pose with companies collecting data." Another student explained, "After taking this class, I am now aware that there are more negatives of using social media than I thought." Finally, another stated, "After taking this class we went into depth on the dangers and harms with the use of social media. Before, I thought social media was mostly harmless as I didn't look too deep into TOS, data collection and anything else harmful. However, after this class, we learned that social media can and is used negatively to impact many things, actual social life, job processes, privacy and many more things."

Interestingly, despite their consternation over privacy violations, participants still used "free" in their description of social media. Students' use of the term "free" indicated that they did not associate the commodification of their data, a pre-requisite for accessing the platform, as a cost. For example, on their post-survey a participant reported that "big business is making a killing off of society due to their access to these free platforms that constantly look at, spy on, sell, collect, and share personal data of ours." Similarly, another participant noted that social media enabled her to connect with loved ones, "without having to rack up

our phone bills or sending things through postal services." However, some students saw validity in the course text's argument that social media use was tantamount to unpaid labor. One participant explained that a negative of social media was that users were working "without pay for their labor on the site," Similarly; another student explained that "We have unknowingly become 'prosumers,' and major companies have used our digital labor in order to create an empire of wealth and greed." The equivocation of free with data collection and digital labor was just one of the contradictory attitudes toward social media that participants reported they were negotiating once the course concluded.

Finding 4: Critical media literacy education brings clarity

On the pre-survey, participants reported an internal struggle regarding their attitudes and behaviors toward social media. As noted in the previous findings, participants demonstrated internal conflicts and contradictory statements regarding social media use. After the course was complete, these contradictions were less pronounced. The participants seemed to focus more on a critical analysis and less about justifying their use of social media.

The pre-survey data revealed that participants were struggling to negotiate their feelings and understanding of social media. For example, one student praised professional opportunities and connections with loved ones that social media allows. Paradoxically, they noted, "In short, it's [social media is] cancer." His use of cancer preceded a list of negative attributes he saw arising from social media use including drama, addiction, mental health issues, misinformation, and cancel culture, cyber bullying, wasting time, and being less productive. Additionally, participants overwhelmingly claimed that social media was a pivotal tool for keeping in contact with their friends and family while simultaneously claiming that social media is responsible for antisocial behavior. One student shared, "I don't really get on social media" although she admits she spends about 3 hours a day on social media. In comparison, another student claimed a positive aspect of social media was the spread of ideas, while noting "One negative I have noticed is the shaping of people's views and ideologies. Whenever someone follows or likes something, it becomes part of their feed." This internal struggle with social media exists even in regards to data collection. Another student noted that social media is, "basically

controlling your thoughts. Another issue is what you buy. On one hand, I enjoy Amazon being able to know what kind of tumblers I want for my whiskey. On the other hand, I don't want to be bombarded with rehab advertisements. Data."

After completing the course, participants' discussion of social media emphasized a much more critical lens. They expressed that they saw the content on social media as not being a fair depiction of the real world. For example, they noted that picture filters were essentially photographic manipulation of users' perceptions of reality. One student explained, "Social media makes everyone feel as if their opinions or their aspect of their everyday life are way more important or influential than they really are." Another stated, "The constant need for everyone to post-their feelings and opinions on things that they clearly have no idea about and the constant posts of stupid filtered 'selfies' all the time." An additional student claimed, "Social media is not the social outlet it used to be. It is now a way for major corporations to generate revenue through the commodification of our data and time." The data raise the possibility that critical media literacy pedagogy is a clarifying experience for students battling an internal struggle over social media use.

DISCUSSION AND CONCLUSION

The findings reveal that critical media literacy pedagogy provides students with the analytical skills necessary for negotiating their social media use. Participants reported a complex negotiation of the affordances and negative aspects of social media after completing the critical media literacy course. Their survey responses demonstrated that they could maintain an appreciation for some aspects of social media while developing awareness about the negative aspects of social media use. This may not lead to a reduction of use, but, as Kellner and Share (2007) explained, it does give students an awareness of the process and ideologies that shape social media. Given this information, students are better positioned to make informed decisions about their media use. However, despite these findings, the study does reveal areas for future research.

The findings of this study illuminate the value in studying the long term effects of pedagogy on students. The data did reveal an area for further research concerning the long term effects of a critical media literacy course. The findings show that students demonstrated contradictory views that left them negotiating their behaviors and attitudes regarding

social media. Scholars need to determine how those negotiations shaped participants long-term attitudes and behaviors toward social media. Furthermore, in order to modify instruction, future research on critical social media pedagogy needs to study how and why pedagogy is, or is not, effective.

Despite the mainstream beliefs about false content online and the instructor's emphasis on this issue in the course, it ranked low on the participants' concerns over social media. Unlike privacy and bullying, false content was only mentioned as a negative by two participants in the pre-survey, and only by five in the post-survey. Even these mentions were cursory, with students citing them as "confirmation bias" or "echo chambers." Future research should be performed to determine a student's awareness and concern for false content and what role, if any, a critical media literacy education can play in addressing those outcomes.

Students did not seem to grasp the concept of the commodification of labor in regards to social media. This is remarkable given that the in class instruction and course learning content analyzed this concept repeatedly. However, participants continued to discuss how social media was "free" despite studying the ways in which their data and labor on social media were being commodified to enrich tech-companies. The participant data illuminates the need for further research concerning participants' understanding of "free" in regards to social media. The findings are also significant for educators. The data reveal that educators should spend some time breaking down the concepts of "cost" "free" and "labor" when they approach social media in the classroom.

This pilot study revealed some promising findings for introducing a critical approach to media education. However, future research is needed about the long term effects of a critical approach to social media literacy. Such a study would benefit from a larger sample size of participants and educators. Future studies are needed on the connection between behavior changes and awareness it relates to social media. These studies should explore student's views of "free" when it comes to social media, and their views on false content online. Regardless, the study reveals a crucial starting point for critical media literacy scholars and practitioners approaching social media.

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APPENDIX
Social media Survey

1. What social media platforms do you use [list all that apply]?
2. What is your favorite social media platform? Why [100 words minimum]?
3. How many hours a day do you use social media [number]?
4. What are the positives of using social media [100 words minimum]?
5. What are the negatives of using social media [100 words minimum]?
6. What is data [provide examples if you can]?
7. Are you concerned about companies collecting your data [yes or no]?
   a. If you are not concerned, explain why others should not be as well [in 100 or so words].
   b. If you are concerned explain, why? What is the harm in digital data collection [in 100 or so words]?
8. Have you ever taken a class that discussed data collection on social media platforms [yes or no]?
9. Have you ever taken a class that discussed the dangers or harm associated with social media use [100 word explanation or no]?[1]
10. What is your age?
11. How do you identify in terms of gender [you can decline to state]?
12. How do you identify in terms of race and ethnicity [you can decline to state]?
13. How do you identify in terms of sexuality [you can decline to state]?

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[1] This question was not included in the post-survey.