Abstract

Digital activism, political activism mediated by digital technologies, offers the promise of increased visibility and political power for marginalized groups. Yet, this has not been the case outside of a few exceptions such as Black Lives Matter. This paper offers theoretical, conceptual critical research that explores why successful digital activism may elude marginalized groups. We ask why many marginalized groups have been unable to harness the power of digital activism. We suggest that greater reliance on smartphones for internet access in marginalized groups may be at the heart of the problem.

Keywords

Digital activism, digital divide, smartphones, leapfrogging, critical research.

Introduction

Digital activism should provide greater opportunity for historically marginalized groups, yet despite a few extraordinary exceptions, the digital disruption engineered by some political groups has not been shared by many of those with the greatest need. In this paper, we look not at what has been disrupted by digital activism, but where disruption should have occurred and yet has not. Digital activism, or digitally mediated political action, should offer unprecedented political power and awareness to marginalized groups because it requires fewer resources and offers greater networking and resource mobilization capabilities than traditional activism (Bennett & Segerberg, 2013; Hussain and Howard 2013; Micó and Casero-Ripollés 2014; Seland and Jarvenpaa 2016; Schradie 2018; Young 2017). Through widespread dispersion on social media and other ICT platforms, digital activism has the potential to provide substantial community empowerment (Leong et al. 2015) and give voices to those who have been historically unheard (Anduiza et al. 2014). With a flick of the mouse, thousands can be mobilized through connective action, which builds social movements through relatable, politically focused ideas combined with digital sharing on platforms such as social media (Bennett and Segerberg 2012; Vaast et al. 2017).

However, with a few exceptions, marginalized groups may not be able to capitalize on the opportunities afforded by digital activism to the same extent enjoyed by social movements in general (Schradie 2018). Extraordinary events, such as Arab Spring in the Middle East, 15M and los indignados in Spain, Occupy Wall Street and Black Lives Matter in the US, have all been held up in the literature as examples of impactful digital activism achieved by people outside of traditional political power (Agarwal et al. 2014; Anduiza et al. 2014; Ghobadi and Clegg 2015; Micó and Casero-Ripollés 2014; Smit et al. 2017; Vasi and Suh 2016). Yet studying only successful movements may not tell the whole story. The number of tried and failed social movements is not tracked or publicized, nor does research in this area offer much in the way of comparisons between the economic and social differences of political groups. An exception to this is found in Schradie 2018, where the social classes of different subgroups within a political organization were related to their mastery of digital activism and subsequent advantages. This work specifically highlighted digital inequity within digital activism.
This paper offers theoretical, conceptual critical research that explores why successful digital activism may elude marginalized groups. We ask why marginalized groups have been unable to harness the disruptive power of digital activism. By examining factors in the digital divide, we note that marginalized groups access and use technology differently than mainstream groups, and much differently than wealthy and educated groups (Anderson 2017; Pew Research 2018; Rhoades et al. 2017). Second, we unpack how marginalized groups access and use technology and focus on this group’s dependence on smartphones for primary/sole internet access (Anderson and Horrigan 2016; Park and Lee 2015; Tsetsi and Rains 2017). Third, we link smartphone internet dependence with less impactful digital activism behaviors. We suggest that because of the difficulty in creating and maintaining higher level digital activism operations on a smartphone combined with cellular data caps, marginalized groups will continue to lag other groups unless an intervention is made. Digital activism tools are easier to use on a computer. The digital activism options best suited for smartphones are low impact activities, also known as clicktivism and metavoicing, (Bennett and Segerberg 2012; Majchrzak et al. 2013) such as liking and retweeting on social media. Writing messages takes more effort on a smartphone, with short messages being easier to produce than long ones, thereby reducing the volume and quantity of messages sent. Creating compelling original content on a smartphone is difficult. (Brown et al. 2016; Schradie 2011; Schradie 2013). Beyond traditional digital divide interventions such as public library computer outlets, community computer classes, and free internet access, changes in smartphone app usability and lowered phone data plan costs may aid marginalized groups in leveraging digital activism. This work is important because by identifying causes of failure, we may offer routes for improved impact for these groups. They may become more effective in telling their story and effecting change. Such actions could bring awareness and reduction of social injustices, thereby improving the welfare of both marginalized groups and society as a whole. This paper continues with a theoretical background on the digital divide and digital activism. The literature review is followed up with a critical view of the issue. We then discuss and synthesize the extant research, providing propositions about unrealized digital activism potential in marginalized groups.

**Theoretical Background**

**Digital divide and leapfrogging**

The digital divide splits the haves and have-nots of information and communication technologies (ICTs) (Hargittai 2010; Hilbert 2014; Hsieh et al. 2012). Not a new concept, the digital divide has been a concern since the 1990s (McConnaughey et al. 1998; Tsetsi and Rains 2017). There are several areas of digital divide research: who has access and who doesn’t, and the causes behind it, along with how different social groups use technology (Tsetsi and Rains 2017). Governments and communities realized early in the digital revolution that some groups were being left behind and many took steps to address it, achieving varying levels of success. Some communities attempted to provide free or discounted internet access while others offered community computer classes, discount equipment, or access to library computers (Barr 2014; Hsieh et al. 2008; Hsieh et al. 2012; Jaeger et al. 2012). Despite concentrated efforts by a range of government, educational, and charitable entities, there is still a wide gap in technology use between white and/or upper income groups and lower income and/or non-white groups in the US (Anderson 2017). A Pew Research study in 2017 showed that while lower-income groups (<$30k annual income) owned smartphones at 2/3 the rate of the highest earners (>100k), their computers, tablets, and home broadband rates were half that of the wealthier group.

The number of smartphones in use by all groups is seen as a sign of hope. Some scholars maintain that the digital divide is not so dire because of mobile leapfrogging (Chirucu and Mahajan 2009; Napoli and Obar 2013). Mobile leapfrogging describes the use of smartphones for internet access by groups that previously were excluded from the benefits of computers and internet access. Mobile leapfrogging is a global phenomenon, particularly in areas where traditional internet infrastructure is difficult to build (Chirucu and Mahajan 2009; Rainie and Perrin 2017). Disparities in technology and access do remain, however. Replacing computers and broadband with smartphones is not an equal substitute and does not bridge or eliminate the digital divide (Anderson and Horrigan 2016; Park and Lee 2015). Smartphones offer a convenient tool to reach the web, but have been called an “inferior form of internet access” compared to computers (Napoli and Obar 2014). Tiny screens and keyboards are difficult for any sort of complex activity such as writing or completing online forms, and data caps limit activities (Mossberger et al. 2012). Mobile apps that are designed for phones are easier to use than internet browsers, but often the trade-off
for simpler design is limited functionality. Smart phones are complimentary to computers, not substitutes.

Inequities in content creation between economic groups is also a continuing problem. Studies indicate that “elite voices still dominate in the new digital commons” because of disparities in digital production and content creation (Schradie 2011). Simply put, those with greater resources create content at greater rates than lower income groups. This situation has implications for which voices are heard and which voices continue to have limited outlets, perpetuating the vicious cycle of poverty and disenfranchisement (Schradie 2011). Part of this problem is because less privileged groups tend to rely on smartphones for their primary internet access.

12% of Americans had internet access solely through their smartphone in 2016 (Pew Research 2016). When these users are broken out into demographics, we find that lower income and non-white groups in the US are far more reliant on smartphones for internet access than white and upper income groups. When household income was $30,000 or less, smartphone-dependent internet access increased to 20%, while only 4% of people with household incomes at $100,000 or greater were phone reliant (Rainie and Perrin 2017). Homeless populations using smartphones for sole internet access may be as high as 50% or greater (Rhoades et al. 2017).

Another way to look at the phenomenon is the percentage of households with broadband internet. Pew Research provides several useful studies in both broadband and mobile usage. In the US the number of households with broadband internet access dropped between 2013 and 2015 (Horrigan and Duggan 2015). While nearly all demographic groups decreased broadband usage during this period, the most dramatic changes were in lower income and non-white households. Households under $75,000 in annual income lost nearly 5 percentage points, while those in the $75-100K range lost none and over $100k lost 3 percentage points. The drop is even more evident when looking at race. Whites as a group dropped 2 points, but blacks dropped from 62% to 54% (8 points) and Hispanics dropped 56% to 50% (6 points) (Horrigan and Duggan 2015; Pew Research 2015).

Yet lower broadband access does not indicate lower internet usage because smartphone usage has risen. In 2013 47% of adults had a smartphone and that was up to 55% in 2015. Today that number is estimated at 77% (Rainie and Perrin 2017). In 2013 8% of Americans relied on internet access from just their smartphone. That rose to 13% in 2015. Looking at the demographic breakdown between those years, the increase for whites was 4 percentage points, but for blacks it was 9 points and Hispanics saw a 7 point gain (Horrigan and Duggan 2015; Pew Research 2015). Comparing household incomes, there is a negative correlation between income and increase in smartphone-only internet usage (Pew Research 2018). The poorer the household, the greater the increase in using smartphones only for internet. Broadband is expensive and poorer households must prioritize where to spend their money. Having both home broadband and smartphone data service is a luxury for many (Horrigan and Duggan 2015).

**Digital Activism**

Digital activism is digitally mediated political action (Bennett & Segerberg, 2013; Selander and Jarvenpaa 2016). Using a range of ICTs, activists leverage technology to advance their agendas. One of the primary advantages of digital activism is how easy it is to spread information (Bennett & Segerberg, 2013). Some digital activist movements are cellphone reliant and use text messaging for communications (Bennett & Segerberg, 2013; Pierskalla and Hollenbach 2013). Modern digital activist movements utilize a “repertoire” of digital tools that align with their core values (Selander and Jarvenpaa 2016). At the same time, participants may eschew those tools deemed at odds with their beliefs (Agarwal et al. 2014). Social media, for example, is widely used in digital activism and when leveraged for collective action is known as connective action (Bennett and Segerberg 2012). Connective action is unique in that it relies upon relatable, easily shared concepts such as “We are the 99%” These messages are intertwined with social media platforms where they may spread virally (Bennett and Segerberg 2012; Vaast et al. 2017). Digital activism is not limited to social media, however.

One of the striking characteristics of digital activism is the ability to take direct action, not simply influence those in power (Denning 2001; George and Leidner 2018). Activities such as clicktivism and metavoicing (liking and sharing on social media, for example) are relatively low impact, although they can reinforce political ideals, serve as reminders, and increase diffusion (Bennett and Segerberg 2012;
Majchrzak et al. 2013; Vasi and Suh 2016). Clicktivism, however well it may serve to inform and motivate participants, cannot deliver the same impact as hacking or exposing confidential government secrets. Social movements that are limited to memes and social media lack the physical presence to force change, and thus may simply allow people to let off steam without effecting real change (Karatzogianni et al. 2017). Authentic change also requires sustained efforts, not intermittent flashes of action (Selander and Jarvenpaa 2016).

On another level, informative websites provide more impact than clicktivism because of their ability to deliver more sophisticated content and in greater volumes. Yet clicktivism still has a role in that it lowers the bar for political participation and enables participation by greater numbers of people (Selander and Jarvenpaa 2016). It is important to align the most appropriate digital activism tools for the desired outcomes to achieve success (Ahuja et al. 2018). The most successful digital activism programs utilize a variety of tools (Ahuja et al. 2018). Cyborg activism, for example, is heavily dependent upon technology, more so than other forms of digital activism (Asenbaum 2017). Anonymous and other hacktivist groups epitomize cyborg activism.

In addition to democratizing participation, digital activism is disruptive because resource costs differ from traditional political action (Schradie 2018; Tufekci 2014; Vaast et al. 2017; Vasi and Suh 2016). Political action resources are not simply financial, though. Because many digital activism initiatives do not require large infusions of cash, scholars have suggested that it lowers barriers for participants (Bennett and Segerberg 2012). Digital activism may not carry greater weight only when well-funded and well-educated participants unite (Hussain and Howard 2013), but it is still highly resource dependent. Digital activists require internet access, computers, and the skills to use them (Micó and Casero–Ripollés 2014). Digital activism may not live up to the democratizing potential celebrated by many scholars (Nam 2011; Schradie 2018). When examining the success factors of digital activism, movements with the greatest impact on sustained change used a variety of digital means, not simply social media (Ahuja et al. 2018). Content creation that is complex and meaningful is often limited to elites because of the greater resources required (Schradie 2011). Last, the possibility of bias may be present in extant research on digital activism, particularly when scholars study successful movements and ignore those that never progressed (McAdam and Boudet 2012; Schradie 2018).

Most people are unfamiliar with political movements that never gain traction and it is fairly difficult to identify failed movements that few know about. One example is the single mothers movement. Unmarried mothers make up one of the largest marginalized groups across the globe with poverty levels that rise well above each country’s average (Brady and Burroway 2012; Cohen 2012). In 2014, a US woman attempted to bring attention to single mothers. She built a website and started an Indiegogo campaign to raise $50,000 for the cause. The campaign closed with 33 contributors and a grand total of $1708 (Indiegogo 2014; (“Single Mom Advocacy | The Single Mom Movement” N.D.). There are numerous reasons why social movements fail, but it is logical to consider that busy, cash-strapped single moms have little money, time, or inclination to push political agendas beyond retweeting or posting on Facebook, even when such movements are to their benefit.

We propose that digital activism may have variable affordance potency which limits its efficacy for certain groups. Affordance potency is “the strength of the relationship between the abilities of the individual and the features of the system at the time of actualization, conditioned by the characteristics of the work environment” (Anderson and Robey 2017). In other words, a system may offer tremendous benefits but only if the user is able to harness the system well enough to make use of those benefits. We propose that while digital activism offers many advantages for a variety of groups, participants must have the appropriate skills, equipment, and internet access to leverage the affordances of digital activism.

**Taking a Critical View**

This paper uses critical theory as its research paradigm. It is neither positivist nor interpretivist, but a third paradigm that goes beyond explanation or prediction and attempts to address the conditions causing inequality and conflict through remedy and change (Myers & Klein, 2011). Drawing from examples in the critical research literature, we analyze the issue of digital activism in marginalized groups using three elements of critical research (Alvesson & Willmott 2002; Myers & Klein, 2011). First, to provide insight we use the writings of Habermas as a lens because he advocated values towards social
emancipation that are close to the views expressed by the authors (Habermas 1984). We critique the phenomenon of digital activism inequality by identifying both the problems and those institutions with the ability to address them. Last, we discuss possible solutions to mitigate these difficulties.

We view the problem of marginalized people and digital activism through the ideology of Habermas, which looks towards transforming the world into a more equal and fair society by allowing people to live up to their potential. Habermas was known for his theory of communicative reason, in which language communicated between people was the source of rationality (Habermans 1984; Calhoun 1992). We find this view particularly relevant to digital activism, which is very reliant on communication. As mentioned earlier, digital activism, like many aspects of information systems, has tremendous potential for emancipatory outcomes. Taking a critical view, it appears that only those able to appropriate digital activism can realize the benefits (Kanungo 2004). We see from the literature that people may be limited in their participation because of the type of internet access and equipment they employ. Thus, the emancipatory promise of increased participation in marginalized groups is bounded and the status quo for advantaged groups remains the same.

We ask where the power lies to change this outcome. Studies on the digital divide suggest that simply providing free broadband internet to the community is not particularly beneficial nor is providing free or reduced cost equipment unless systematic training is undertaken to instruct and maintain participation (Hsieh et al. 2008, 2012; Kvasny and Keil 2006; Kvasny and Trauth 2003). We identify several institutions that may offer solutions. First, most communities in developed countries have schools and universities with computers, broadband internet, and facilities for computer instruction. Belo et al. (2016) found significant spillovers into the community when local schools introduced IS to students. In their study in Portugal, students learned about computers and the internet on campus which correlated with a 17% increase in home internet usage. Second, public libraries currently offer free computer and internet access and many also offer classes (Tsetsi and Rains 2017). Third, large companies, especially those who employ large numbers of employees within a locale, either already have existing computer labs (with broadband internet) or have the capacity to create one. In such firms, white collar workers have likely been the primary beneficiaries of computer labs as blue collar workers often have little need to use computers in their job.

We have identified three institutions that could improve not only digital activism participation by marginalized groups, but also narrow the digital divide in general. Public schools are often empty at night and on weekends, times when members of the community often have greater availability. Many schools also keep their lights on to discourage vandalism or to provide lighting for janitorial and facilities staff. Likewise, heating and cooling systems may be running during after-school hours, as well. If public school computer labs could be used during after-school hours, it would provide a place for both instruction and access for the community. Public libraries already provide many of these services. However, they are often underfunded and have limited capacity. Lack of funding may mean no dedicated IT staff, older computers unable to handle newer software, frequent crashes or system issues, or a lack of relevant classes to teach users. Libraries may also have limited facilities with no separate computer rooms where classes may be held. Time limits are not uncommon in popular libraries, and those with many open computers may lack the marketing funds or knowledge to spread the word. If libraries could receive additional computer funding through public or private means, they could address many of these issues and provide convenient access to computers, software, and broadband internet along with instruction and support. Last, larger corporations could take up the mantle for greater computer and broadband access by building or opening existing computer labs to the public. Extending access and classes to blue collar workers and/or local residents could have an emancipatory effect on the community and improve workforce quality for the organization at the same time, resulting in a win-win for both.

**Discussion**

We have provided snapshots of digital activism and the role of smartphones in providing internet access for marginalized groups such as lower income and non-white communities, particularly in the US. At this point we synthesize this knowledge to address our research question and provide propositions to stimulate thought on the topic. Why do marginalized groups often fail to realize success through digital activism? To summarize our thesis, marginalized groups may not achieve the same level of success as mainstream groups because they are dependent on smartphones for internet access.


**P1:** *Marginalized groups are more likely to participate in digital activism via smartphone than non-marginalized groups.*

The limitations of smartphones inhibit effective political content creation and promote content consumption. We do not imply that it is impossible to wage digital activism battles on smartphones. There have certainly been a number of successful movements such as Arab Spring and 15M. Live tweets of current events, such as those experienced by women driving in Saudi Arabia, have also been effective. However, most major political movements require more than tweets and videos to effect real and lasting change because smartphones are used far more for content consumption than content creation (Hussain and Howard 2013). Despite ubiquitous apps, complex content creation is still best accomplished on a computer (Gomes et al. 2014). For example, the #MeToo initiative is an orchestrated movement which gained momentum via social media, but there are many other elements that support it, such as offline investigations, journalistic research, and legal challenges. This would be a difficult campaign to wage if smartphones were the only way to build the movement. With #MeToo, smartphones were used to great effect in amplifying the message through social media virality, but much of the content was created on computers. A similar situation is apparent in the Black Lives Matter (BLM) movement. While most people think of BLM in terms of impromptu smartphone videos of police brutality against unarmed people of color, this movement is supported through a widespread offline network of local groups and a sophisticated website that provides fundraising, structure, and resources (BlackLivesMatter.com). In short, these two examples demonstrate how smartphone usage has amplified the message, but the movements could not have been waged solely on smartphones. Successful digital activism requires infrastructure and corroboration (Hussain and Howard 2013). Marginalized people often have limited computer skills (Lee et al. 2015). Yet these skills, such as coding, hacking, and content creation, are valuable resources for high impact digital activism.

**P2:** *Digital activism that is mediated by smartphones provides less impact than computer based digital activism that leverages multiple media, structures, actions, and venues.*

Another reason for lower success in digital activism is because smartphones are not as conducive to generating strong political messages as computers. Creating large amounts of original content is difficult on a phone. Small screens and keyboards are best used for short messages. Long messages with considerable editing and multimedia is difficult to create and while videos can be easily captured on a phone, editing is not as easy (Mossberger et al. 2012). Uploading large files and submitting forms is arduous (Kash 2016). Smartphones are best used for spreading political messages via liking and forwarding, not for creating the sophisticated original content more often produced by elites (Schradie 2011).

**P3:** *Digital activism mediated by smartphones contains less complex content creation than content created on computers.*

Content creation lags content consumption by a wide margin on smartphones (Brown et al., 2016; Brake 2014; Dahlstorm and Brookes 2014). In regards to content that does exist, not all content is created with mobile access in mind and content that is not mobile friendly can inhibit usage (Gomes et al. 2014). There is substantial documentation that content creation lags content consumption by a wide margin. Gomes et al. (2013) found a 24% to 93% discrepancy between creators vs. consumers in their study. Vaast et al. (2017) note that a tiny number of participants created content in original tweets (49) compared to those who only retweeted (975), with a middle group of 243 who created original tweets at less than a quarter of the frequency of the highest group. We suggest that those who are dependent upon smartphones for internet access consume far more than they create.

**P4:** *Digital activism mediated by smartphones is more likely to revolve around content consumption and meta-voicing than digital activism mediated through computers.*
Smartphones are generally not capable of enabling direct political action. Digital activism with the greatest impact includes activities that allow participants to take direct, as opposed to indirect, action (Coleman 2011; Smit et al. 2017). Direct action includes hacking, information/data exposure and leaks, and citizen hackathons. Other digital activism initiatives such as social media, funding, clicktivism, writing to legislators, etc. seek to influence political actors rather than act directly. When groups of people are limited to ICT that is not amenable to direct action, that limits their ability to effect change. Smartphones are not the tools of choice for people attempting to promote a distributed denial of service attack, steal sensitive data, or build community digital infrastructure.

\[ P5: \text{Digital activism mediated by smartphones limits participants to indirect action.} \]

Lastly, those who are dependent upon smartphones for internet access are often restricted by data caps and frequently experience hitting data limits and service suspension (Horrigan and Duggan 2015; Mossberger et al. 2012). This inhibits digital activism by forcing participants to prioritize internet use for critical needs.

\[ P6: \text{Data caps experienced by smartphone-dependent internet users impede digital activism movements.} \]

A summary of the attributes of smartphone-dependent digital activism is shown in Table 1.

<table>
<thead>
<tr>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favors content consumption over content creation.</td>
</tr>
<tr>
<td>Inhibits complex content creation.</td>
</tr>
<tr>
<td>Promotes indirect action over direct action.</td>
</tr>
<tr>
<td>Limits organizational infrastructure development.</td>
</tr>
<tr>
<td>Restricted by cellular data caps.</td>
</tr>
</tbody>
</table>

\[ \text{Table 1. Attributes of smartphone-dependent digital activism.} \]

Conclusion

In summary, we suggest that marginalized groups may experience less success with digital activism because they are often dependent on smartphones for their primary internet access. The literature on the digital divide indicates that while smartphones are better than no internet access, they are a poor second to computers. A lack of computer skills and computer hardware compounded by limited internet access perpetuates the digital divide. It is not gone, it has only changed. The implications of this research demonstrate that continued work in marginalized communities is still necessary to reduce digital inequality, especially in light of the role technology plays in modern political action. Future research could promote this work with empirical studies of digital activist groups in action, studying both successful and less fruitful endeavors. Additional work could be done with schools, libraries, and local companies to expand and enhance computer access and education, as well. This paper contributes to the literature of both the digital divide and digital activism by taking a critical view of the role of smartphones for primary internet access by marginalized groups. By addressing these inequalities, we may aid social welfare and improve the well-being of a great number of people. This work is important because by identifying methods that offer the greatest success for these groups, marginalized people will be more effective in telling their story and effecting change. Such actions can bring awareness and reduction of social injustices, thereby improving the welfare of both marginalized groups and society as a whole.
References


Digital Activism in Marginalized Groups


