University of Nevada, Reno

Cyberactivism: A generational comparison of digital activism

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by

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Abstract

Since the events of the Arab Spring and Occupy Wall Street took place largely through the Web using social networking and mobile devices, the concept of "cyberactivism" has become a popular topic of discussion and criticism within the media and academia. Cyberactivism, also referred to as web-based or digital activism, focuses on the use of technology to participate in political activism. Within cyberactivist scholarship, there is a focus on "digital natives"—youth who have grown up surrounded by and immersed in technology—and how they use technology for political means. Subsequently, those who used technology later in life are referred to as "digital immigrants." In this study (n = 305), participants were surveyed on their digital activist habits. The data allowed for an examination of the specific outlets of cyberactivism and the current political and technological climates that support that behavior. The findings, for which a Chi square statistical analysis was used, compare habits between age groups, revealing generational differences in the use of web-based tools. In particular, digital natives are more likely to use the internet to engage in political discussion and activity, but they do so passively. Digital immigrants, however, see the web in more of a supporting role for their activism, as they use web-based tools to emphasize the use of in-person action and discussion. Areas of future research may focus on the implications of these patterns of cyberactivist behavior for digital natives and digital immigrants, and how these habits will impact the future of political activism.

Keywords: Cyberactivism, digital literacy, digital activism, activist literacy.

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And when it's all a blur, you are the hard line / in the disorder, you are the peace sign. – Lights

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Introduction

For youth in the United States, the internet is a central aspect of their lives, serving various purposes—educational, social and political. Digital natives—defined as people born and raised with technology heavily integrated into their day-to-day tasks and activities (Prensky, 2001; Palfrey & Gasser, 2008)—are prone to frequent participation on the web; thus, their involvement in political activism is now largely technological. However, the internet is now a presence in the majority of American homes; it is not just digital natives using the web for political purposes.

Tech-based activism is known as cyberactivism, and cyberactivism has been the foundation for several recent large-scale political movements; specifically, the Arab Spring and Occupy Wall Street (El-Nawawy & Khamis, 2012). Both movements, organized and demonstrated by people of all ages but heralded by youth, had strong web presences, allowing for the movements' progress to be showcased to the world. Participating in digital activism is very much a skill—it involves several types of digital and traditional literacies, including critical thinking, writing, media literacy and political literacy.

Cyberactivism comes naturally to many digital natives who are used to sharing opinions and beliefs on social media websites such as Facebook and Twitter (Amin, 2010; Palfrey & Gasser, 2008). Social media also promotes real-world interactions, fostering event-planning and meetups. These tools allowed for thousands of protestors to participate with both the Arab Spring and Occupy Wall Street in the actual locations. However, the digital components of these movements lasted much longer than the in-person protests, enabling protestors to develop and redefine their fights as the movements continued to unfold.

On a smaller scale, these habits are enacted every day by people involved in causes across the spectrum. Users of websites like Twitter, Facebook and Reddit look to online petitions, livestreams, forum discussions, and features like "reblog" or "retweet" to participate in movements (El-Nawawy & Khamis, 2012). Each outlet offers a different way to participate—some lean more toward "passive," in the sense that they do not require posting or seeking out original content. Others require "active" participation through discussion, providing evidence or proof, locating an article on one website and sharing it on another.

Current scholarship suggests that age plays a role in the differences of this behavior. Digital natives often view resharing as effective—why repeat what has already been said once so effectively? A "like" demonstrates consent or approval. Meanwhile, digital immigrants infuse activity on social media with responses, opinion and additional information. Therein lies the fundamental difference between "active" and "passive" (Rotman et al., 2011).

Purpose of the Study

The purpose of this study was to examine any trends in the web-based outlets and habits associated with digital natives to participate in political discussion and activism. Because cyberactivism is a relatively recent field of study, this data helps drive future research focused on specific types of web-based resources, such as social media and online petitioning. The data from this study was intended to identify the preferences of particular technology platforms by digital natives, as well as digital immigrants, to help predict future trends of cyberactivism.   This has larger implications in the future of democracy about how constituents will choose to participate in the democratic process with the advent of new technologies.

Research Questions

The research questions for this study were as followed:

1) How do digital natives use web-based resources to participate in political movements?

2) What are the habitual differences between digital natives and digital immigrants in the use of web-based resources to participate in political movements and discussion?

Review of the Literature

In 2010, a revolution erupted in the Middle East. The fire of revolution quickly spread throughout the world. But what seemed like an immediate blaze of civil unrest was in reality a slow burn—the result of months, even years, of collaboration and preparation, and much of it took place on the internet. This instigated a research movement centered around digital activism and its implications for the future (Graziano, 2012; Campante & Chor, 2012; Hoffman & Jamal, 2012; Sivitanides & Marcos, 2010). Several synonyms of digital activism include online activism, web activism, cyberactivism and hacktivism (Graziano, 2012; Krapp, 2005; Sivitanides & Marcos, 2011). For the purposes of this paper, the term "cyberactivism" will be used, as it has been embraced by digital activists, and is a succinct term that can be used as either a noun or an adjective.

Framework of Literature Review

It's important to understand the context for which social networking and web-based tools were used during Occupy Wall Street and Arab Spring. Cyberactivism as a research topic encompasses several fields of research, such as digital literacies and the concept of distributed intelligence, which explores how people think and collaborate using technology for political purposes. Expanding on this, it is necessary to define the characteristics of digital natives and

digital immigrants. Synthesizing these separate fields of research is what constitutes much of current cyberactivist literature.

Social Technology Use During the Arab Spring and Occupy Wall Street

The Arab Spring was unlike any political event in modern history (Campante & Chor, 2012; Graziano, 2012; Hoffman & Jamal, 2012; Kerton, 2012). Rather than torches, protestors held lit-up smartphones as they marched through the streets, documenting nearly every action and broadcasting it throughout the entire world. Young men and women sat on sidewalks with laptops and tablets, using Twitter and Facebook as outlets for political expression while also marching and protesting (Amin, 2010; Howard & Duffy, 2011; Khondker, 2011; Sivitanides & Marcos, 2011; Valenzuela, 2013).

A few months later, Occupy Wall Street formed in July 2011 in the bedrooms of American activists across the country. Responding to the "call for action" by the magazine *Adbusters*, a handful of young people—most under the age of 25—established a website, a forum, and an internet relay channel (IRC) to communicate. Known as "occupiers," they established the logistics of a New York City-based demonstration, intended to last for months, even years. Traditional political forums—town hall meetings, general assemblies, debates and strategy meetings—took place on the web through free services like Skype or through email exchange (Gaby & Caren, 2012; Ladhani, 2011). While the protestors eventually left the physical occupation of Zucatti Park, Occupy Wall Street continues to have a strong online presence (Ladhani, 2011; Zápotočná, 2012).

Digital Literacies

The people involved in these initially web-based political movements demonstrate remarkable digital literacies—the skills to understand and use electronic media (Bawden, 2001). Digital literacies has several synonyms, including computer literacy, IT literacy, media literacy, network literacy and information literacy (Bawden, 2001). For the purposes of this research, the term digital literacies will be used, because it encompasses all forms of new media and technological devices, including computers, and also smartphones and tablets, for which there are a limited amount of empirical studies (Howard & Duffy, 2011).

The research of digital literacies became popular during the 1990s, when technology became more readily available for much of the Western world. While literacy once referred to the ability to read and write, this has since evolved from exclusively print sources to digital sources as well. As Bawden (2001) argues, the skills used in traditional (print) and digital literacies are largely the same. However, digital literacy also encompasses the ability to think critically about new information, and also demonstrates competency in "communication skills which enable the individual to function, appropriate to his age, independently in society" (Hillrich, 1976). According to McClure (1994), who is attributed as coining the term "network literacy," a digital literate person also possesses:

"knowledge: an awareness of the range and uses of networked resources; an understanding of the role and uses of networked information in problem solving and 'basic life activities; an understanding of the system by which networked information is generated, managed and made available; and skills: retrieval of specific types of information from networks; manipulation of networked information[--]combining,

enhancing, adding value; use of networked information to help make work-related and

personal decisions." (pg. 117)

Lanham (1995) builds on this, noting that digital literacy is also about decoding, deciphering and

synthesizing between a "shifting mixture of words, images and sounds." Thus, it's important to

distinguish that digital literacy is not simply an extension of traditional literacy, but a set of skills

and knowledge in its own right (Hillrich, 1976; McClure, 1994).

  Distributed intelligence. Digital literacy, and subsequently cyberactivism, often taps

into a community's distributed intelligence. Distributed intelligence refers to members of a

community—each offering individual skills—collaborating on a unified cause or project (Fischer

& Konomi, 2007; Innes and Booher, 2000). Distributed intelligence, also sometimes referred to

as distributed cognition, is "a complex, adaptive learning system that can be sustainable in the

face of unpredictable futures" (Innes & Booher, 2010). In the event of cyberactivism, or

activism of any sort, distributed intelligence refers to how people "self-organize" outside of the

government structure (Fischer & Konomi, 2007; Innes & Booher, 2010). Philosopher Wilhelm

Wundt, attributed to the field of distributed cognition, argued that literacy is fundamentally a

public skill; no one person dictates what becomes language or culture (Solomon,

1993). Cyberactivism, too, enables people to participate in political movements in many ways,

aside from the standard civic expectations such as voting or attending in-person political rallies.

Thus, cyberactivism is largely driven by distributed intelligence based on the way discussion and

collaboration arises in virtual environments.

Digital Natives and Digital immigrants

With an abundance of accessible technologies, it's easier than ever for people to be connected to global issues and current events. In the United States, people born in the last couple of decades are immersed in technology from birth. These are the people known as "digital natives" (Gaston, 2006; Palfrey & Gasser, 2008; Prensky, 2001). Subsequently, those born before the 1980s are referred to as "digital immigrants" (Palfrey & Gasser, 2008; Prensky, 2001;). Digital natives are youth between ages of 15-24, and have used the internet for a minimum of five years. As mentioned before, there is some scholarly controversy over the accuracy of these terms. However, this paper seeks to evaluate the characteristics of both groups and, in an effort to adhere to the standards of other research published in this field, will follow suit. It is the researcher's hope that new terms will soon emerge and become the standards for the field.

Because of the abundance of technology introduced to digital natives at a young age, digital natives often grow up with a deeply ingrained skillset and understanding of how to use technology and internet-based resources in all aspects of life (Bawden, 2001; Gaston, 2006; Palfrey & Gasser, 2008; Prensky, 2001). Digital natives possess finely tuned digital and information literacies, specifically reading, writing, communicating and learning on digital platforms such as computers and mobile devices (Bawden, 2001; Ng, 2012; Palfrey & Gasser, 2008; Prensky, 2001). Thus, digital natives go first to web-based platforms, rather than in-person meetings, to enact change and conduct most day-to-day tasks (Crisco, 2009). However, many digital natives are not consciously aware that they possess these skills (Bawden, 2001; Ng, 2012; Palfrey & Gasser, 2008). Digital natives are familiar with expressing opinions often

through social networking and are often experienced in participating in debate (Palfrey &

Gasser, 2008; Prensky, 2001).

Prensky (2001) refers to those born before the 1980s as "digital immigrants," suggesting

that they approach technology as a learned, as opposed to highly integrated, skill. This term

has been highly controversial; however, there is a lack of an equally scholarly alternative. Thus,

"digital immigrants" will be used throughout this paper purely as a way to refer to those born

after 1989. Digital immigrants are those who are introduced to technology later on in life, and

are therefore not "native" to it (Gaston, 2006; Prensky, 2001). This does not mean that digital

immigrants are not proficient in technology, as many are in the same generation as digital

natives or spend a great deal of time immersed in technology; however, according to Prensky

(2001), it does play a role in perceptions toward technology. Digital immigrants are more likely

to view technology, and social media in particular, as a tool secondary to in-person interactions

(Gaston, 2006).

Criticisms of Digital Natives

New research indicates that "digital natives" could be an overreaching term. According

to a new study published by the International Telecommunications Union (2013), 96 percent of

American millennials are digital natives. This is comparable to millenials in Asian countries

where technology has been integrated into homes and is widely valued (International

Telecommunications Union [ITU], 2013). However, this is not indicative of the rest of the world.

In the study, digital natives is seen as a Western construct. Youth in developing countries do

not have the same access to technology; thus, they often don't meet the minimum

requirements to be classified as digital natives. This is especially relevant to political

movements, as recent protests in countries such as Egypt, Syria, Brazil and Turkey were largely comprised of youth who are familiar with technology but may not have grown up with it like American digital natives (Neumayer & Raffl, 2008).

Furthermore, the terms "native" and "immigrant" become especially problematic, as the people the terms refer to often fall, quite literally, into those categories. The terms have racial implications, too, and have negative connotations—digital "natives" are often criticized for prioritizing technology, social networking and the internet over in-person interactions; whereas digital "immigrants" are seen as outsiders infringing on youth culture. While these critiques are important in our increasingly global society, the current study focuses on digitally-active people in a developed, Western society. Therefore, the term "digital native" represents a useful construct in this research.

Cyberactivism

Because digital natives rely heavily on technology and internet access, a new form of technology-based civic engagement has emerged, known as cyberactivism (Amin, 2010; Christensen, 2011; Crisco, 2009; Valenzuela, 2013). Cyberactivism is a subset of civic literacy and uses many of the same skills. The realms of activism are often distinguished through the terms "digital activism" and "real-world activism." However, this is problematic because it implies that digital activism occurs outside the realm of real-world issues (Joyce, 2010). Resources like Change.org and Washington D.C.'s web portal for creating petitions and sending them to members of the U.S. government demonstrate how digital activism has become the first step in many real-world movements.

Digital natives involved in current affairs go first to digital realms in order to protest, discuss and enact social change. Political events such as the Arab Spring, Occupy Wall Street and the Syrian Uprising all began as online movements, quickly evolving into full-fledged political efforts (Gaby & Caren, 2012; Khondker, 2011). And now, most causes begin with a web component—environmental issues, gender inequality, elections, human rights and other causes are largely discussed online first before any other action is taken. The web has become a hotbed for political discussion and engagement. Brunsting and Postmes (2002) attribute the rise in web-based activism, in part, to a desire for collective action, and to involve activists who would normally remain on the periphery to participate.

Role of activist literacy in cyberactivism. Activist literacy plays an important role in empowering marginalized communities (Hart, 2006; Jocson, 2008; Welch & Freebody, 1993). Many educators have made civic literacy a priority in classroom learning, linking it to strong critical thinking, writing, reading and analytical skills (Kahne, 2010; Welch & Freebody, 1993). Literacy itself has long been linked to social justice because literacy correlates to who is able to participate in democratic processes (Freire, 1970; Hart, 2006; Jocson, 2008).

While civic and activist literacy have had a significant impact in making current events relevant for students in elementary and secondary school, these skills are not encouraged once students reach college (Biddix, 2010; McCafferty, 2011). However, college students respond well to opportunities to express opinion and critical thinking on web forums, making links between classroom learning to relevant issues (Biddix, 2010; Ciardiello, 2004; Lin, 2010). This can be cultivated by information professionals such as librarians, journalists and connected educators (Bruce & Lampson, 2002; Culver & Jacobson, 2012; Livingstone, 2008). Student-led efforts in

educational settings, often digital, have been successful because students are able to use technologies with which they are familiar (Biddix, 2010; Bruce & Lampson, 2002; Ciardiello, 2004; Culver & Jacobson, 2012). Support for this process on college campuses, including providing the support for students to engage in political processes, has resulted in a more engaged student body, where students are aware of their own media literacy and use it both inside and outside classroom settings (Biddix, 2010; Ciardiello, 2004; Livingstone, 2008).

Instruments of cyberactivism. Essentially, any form of political participation online can be considered cyberactivism. However, some tools and resources are more popular than others. Twitter and Facebook are often attributed as the most popular tools, but forums, news websites and smaller social networking sites are also used (Amin, 2010; Christensen, 2011; DeLuca, Lawson & Sun, 2012; Howard & Duffy, 2011; Joyce, 2010; Khondker, 2011; Neumayer & Raffl, 2008). According to Rotman et al. (2011), websites that foster uploading and exchange of multimedia such as YouTube (video) and Flickr (photography) "introduced the opportunity for wide-scale, online social participation" (pp. 3). In the past few years, petitions and surveys have also gained popularity and have been embraced by governments, including the United States government, as a streamlined approach to addressing issues from constituents. Petition sites like Change.org, ThePetitionSite.com, and the White House's We the People portal have become popular outlets for expression when constituents feel compelled to speak up to representatives. Rather than writing a letter or email, constituents can now create a petition, gain signatures, and send that directly to a representative.

Criticisms of cyberactivism. There has also long been a negative stigma placed upon digital natives who seek out likeminded people on the internet, as people from older

generations see it as a passive way to participate in discussion (Boulianne, 2009; McCafferty, 2011; Rotman et al, 2011). A term to describe this is called "slacktivism," which refers to activist efforts started on the web intended to "raise awareness" without facilitating an in-person event or an effort with tangible results (Boulianne, 2009; McCafferty, 2011).   A similar term is "clicktivism," which refers to the act of clicking as an activist behavior—clicking to "like" a post on Facebook, upvote a post on Reddit, retweet an article on Twitter, changing a profile picture, and other typical activities on a social networking website (Bakardjieva, Svensson & Skoric, 2012). Rotman et al. (2011) distinguish between "slacktivism"—associated with passiveness—and "practical activism":

> "We define 'slacktivism' as low-risk, low-cost activity via social media, whose purpose is to raise awareness, produce change, or grant satisfaction to the person engaged in the activity; We define 'practical activism' as the use of a direct, proactive and often confrontational action towards attaining a societal change" (pp. 3).

Slacktivism is a term generally referring to digital natives, who often see social media as being an equally "real" form of communicating and maintaining relationships; thus, "slacktivist" gestures such as changing a profile picture to raise awareness of a cause are viewed as legitimate forms of participation and also fulfills an ego-driven desire to be seen as politically literate and involved (Baston, 2003; McCafferty, 2011; Rotman et al., 2011). Clearly, this does not include all digital natives, as the majority of participants in the Arab Spring and Occupy Wall Street were youth; however, it does indicate a potential trend toward more passive involvement in political causes (Boulianne, 2009).

Summary of Literature Review

In this chapter, several concepts were explored.   First, it was important to define the concept of digital literacy, which refers to the ability to read, write, and communicate using digital tools and devices (Lanham, 1995; Lankshear & Knobel, 2006). Distributed intelligence, in which the members of an online or in-person community each take on a role to achieve shared goals, builds upon those digital literacies. From this arises cyberactivism, a phenomenon in which web-based resources are used to accomplish political activism, as demonstrated by the large technological presences in Occupy Wall Street and the Arab Spring (Bakardjieva et al., 2012; El-Nawawy & Khamis, 2012; Gaby & Caren, 2012; Graziano, 2012). Cyberactivism has been dominated by digital natives, a term created by Prensky (2001) that refers to those who grow up with technology and the internet heavily integrated into their lives. However, a criticism is that cyberactivism is an ineffective form of activism as it takes place on the internet and encourages passive forms of activism (Bakardjieva et al., 2012; Rotman et al., 2011). Subsequently, the term "digital natives" refers predominately to Western youth who are able to access technology more than youth from developing countries (Gaston, 2009; ITU, 2013). With these criticisms in mind, this study sought to evaluate the cyberactivist habits of digital natives and digital immigrants.

Methods

Description of Study

The study examines how digital natives use the internet to participate in political activities. As part of this study, the *Survey on Cyberactivist Habits of Digital Natives* was created to collect data on how people identify as activists and what tools they use to participate in discussion, research topics, access the news and plan or attend real-world events (Appendix A). The survey was specifically designed to be taken quickly via a web survey interface.

This study uses a survey with correlational analyses, based on the existing research on the subject of cyberactivism. Because this is a global topic, many studies in this field take a quantitative approach to determine if the results are statistically significant (Vis, 2013). A correlational approach was taken to determine the habits of digital natives and digital immigrants, and subsequently, to compare the data across age groups.

Instrumentation

The first step in creating the survey involved reviewing relevant literature that explored the patterns, themes and habits pertaining to digital activism. Current research highlights several factors: the way digital natives use web-based tools for digital activism; which websites and devices are used most often; and which movements these tools and devices have been used in. Thus the questions were created based off of these themes, and also to gather input from digital immigrants to see if the themes were consistent across age groups.

The survey instrument consisted of 10 questions, starting with basic demographic information—current age, level of education, age of first computer use and age of first internet

use. Then, the questions inquired about the participant's activity level of social networking; identification as an activist; preferences for accessing and researching information on causes; and habits of sharing and discussing political news. Questions were given as a multiple choice or with a small text box in which the participant could include a short response (Appendix A). Several noteable responses are highlighted in the discussion.

Participants

This study looks at both digital natives and digital immigrants, who are defined based on their age. Specifically, digital natives are considered to be those who were born after technology had become a mainstream way of life. Prensky (2001) establishes this as people born after 1980. However, some researchers say the true divide happens in the late 1980s; some go as far to say the term only applies to people under the age of 20 years old, referring to those born in or after 1993 (ITU, 2013). According to the International Telecommunications Union (2013), a digital native is a person between 15 and 24 years old, with a minimum of 5 years of active internet and computer use. In an effort to be true to the consensus in the field, this paper classifies digital natives as those born in or after 1988, thus indicating that the oldest digital natives are 24 years old.

The survey was first administered online through Facebook, and then through Twitter using hashtag #cyberactivism. The hashtag was used to generate exposure to the survey. Subsequently, the survey was also posted on Reddit.com in related forums on activism, literacy, and technology. Distribution through social networking resulted in more than 200 responses. In order to have more data to analyze differences between age groups, the survey was then

administered specifically to students attending college in Northern California. From this, 100

responses were collected. This provided enough data to compare responses based on age.

Procedure

All responses for the survey were anonymous. The 305 responses were collected

digitally using a Google Form for the survey, and a Google Spreadsheet to track results. The

Google resources were only accessible by the researcher and had to be accessed with a

password. Results were then imported into an Excel spreadsheet, and subsequently uploaded

and coded into an SPSS document. All data was analyzed in SPSS software using crosstabulation

and Chi-square analysis. The responses for questions about the use of social networking and

forums were coded based on "passive" and "active" use (Appendix A). These codes were taken

from Rotman et al.'s (2011) determination—"passive" refers to "low-risk, low-cost activity"

using social networking; "active" refers to "confrontational action." However, social

networking habits can be differentiated as "passive" and "active." "Liking" or "retweeting" an

article or status update on Facebook and Twitter are passive because the user is responding to

content posted by others, and does not offer original commentary or instigate discussion.

Posting an article by taking the URL from another source or website and sharing it on a social

networking site is considerably more passive, as it is not an action reliant on existing content.

Results

A Chi square test with crosstabulation was performed to examine the relation between

cyberactivist habits and age. The sample population included 305 people, and a total of 253

participants answered all of the questions.

Demographics of Participants

Of the total participants, 41 percent were digital immigrants (*n* = 121) and 59 percent were digital natives (*n* = 176). Eight participants did not provide their age. Participants were also asked about their level of education. However, crosstabulation revealed few findings correlating education level and habits. The majority of digital natives were college students (75 percent), and the majority of digital immigrants were graduate students (25 percent), as indicated in Table 2.

Digital natives were shown to use both computers and the internet at a younger age than digital immigrants. Of the digital natives (*n* = 161), 20 percent first used a computer under the age of 5; 78 percent first used a computer between 6 and 11 years old; and 2 percent first used a computer older than 11 years old. While 57 percent of digital immigrants (*n* = 113) also used a computer first between the ages of 6 and 11, they were, on average, older than digital natives when it came to childhood internet use: 69 percent of digital natives compared to 26 percent of digital immigrants. These frequencies were statistically significant, indicating that there is a generational difference in childhood computer use, (n = 274) = 53, p < .001, and internet use, (*n* = 265) = 55.6, p < .001.

Table 1

Age of participants

Age	*n*	%
0 – 24 (DN: Digital Natives)	176	59
25+ (DI: Digital Immigrants)	121	41

Table 2

Education of participants

Level	*n*	% of DN	% of DI
High school student	8	4	0
College student	165	75	3
College Graduate	32	3	15
Graduate student	68	14	25
Did not attend college	23	6	11

Note. DN = digital natives; DI = digital immigrants.

Table 3:

Age (in years) of first computer use

Age	n	% of DN	% of DI	X^2
> 5	42	20	9	
6 - 11	189	78	57	53*
< 11	43	2	35	

Note. DN = digital natives; DI = digital immigrants.*p < .001

Table 4:

Age (in years) of first internet use

Age	*n*	% of DN	% of DI	*X²*
> 5	5	3.2	0	
6 - 11	135	69	26	55.6*
< 11	125	28	74	

Note. DN = digital natives; DI = digital immigrants. *p < .001

Identification as Activists

Responses of digital natives and digital immigrants identifying as activists were similar.

Participants were given the options "yes," "no," "on occasion" and "only for a specific issue"

(Appendix A). Among digital natives (*n* = 174), 71 percent replied "yes," "on occasion" and "only

for a specific issue." Similarly, 69 percent of digital immigrants (*n* = 121) identified as activists in

some capacity. As indicated in figures crosstabulated in Table 5, there was not a significant

relationship between age and identity (n = 295) = 1.6, p > .05. However, it's worth noting that

digital immigrants as a group had a higher percentage of identifying as an activist.

Table 5

Identification as activist

Response	*n*	% of DN	% of DI	*X²*
Yes	86	28	31	
No	42	13	16	
On occasion	132	48	41	**1.6**
Only for a specific issue	35	11	13	

Note. DN = digital natives; DI = digital immigrants.

Use of Online Petitions

Both digital natives and digital immigrants reported high use of signing online petitions. Thus, age was not significant in revealing differences in petition use, (*n* = 271) = .54, p > .05. The survey question asked if the participant had either created or signed an online petition, and a text box allowed for written responses (some of which are highlighted in the Discussion). Responses were consistent and comparable across age groups, as indicated in Table 6.

Table 6

Petition signage

Response	n	% of DN	% of DI	X^2
Yes	95	37	63	
				.54
No	176	32	68	

Note. DN = digital natives; DI = digital immigrants.

Use of Devices

As shown in Table 7, 70 percent of digital natives preferred mobile devices, including smartphones, tablets and laptops, but also indicated use of stationary (desktop) computers. Digital immigrants were slightly more likely to use mostly desktop computers, indicating a preference for stationary computer usage, (n = 160) = 8, p < .05. The responses, as shown in Table 7, were relatively comparable.

Table 7

Devices used to participate in online discussions

Types of devices	*n*	% of DN	% of DI	*X²*
Mobile	160	70	53	
				8*
Stationary	31	11	15	
Both	62	19	32	

Note. DN = digital natives; DI = digital immigrants.*p < .05

Use of Social Networks

However, although digital natives were shown to be more mobile, digital immigrants were more likely to engage in "active" forms of activism. On average, digital natives used social networking for political means in passive ways—such as retweeting a link on Twitter or liking a status on Facebook; several options for common activities were given in a checklist in the survey, as seen in Appendix A. Digital immigrants preferred active means such as posting an article from an outside source or starting a forum conversation. Table 8 shows the responses based on passive and active web activity. These results are statistically significant; 81 percent of digital immigrants indicated an "active" use of social networking, compared to 62 percent of digital immigrants, (n = 256) = 10.8, p < .001. Table 8 shows there is a relationship between digital natives and the likeliness of discussing political issues online, either using social networking or forums, (n = 172) = 10.4, p < .05.

Table 8

Use of social networks

	n	% of DN	% of DI	**X^2**
Passive	77	38	20	
				10.8*
Active	179	62	86	

Note. DN = digital natives; DI = digital immigrants. *p < .001

Table 9

Participation in online political discussions

	n	% of DN	% of DI	X^2
Never	42	13	16	
Rarely	76	24	29	
Occasionally	125	49	34	10.4*
Often	37	11	15	
Frequently	11	2	7	

Note. DN = digital natives; DI = digital immigrants.*p < .05

Access of News and Information

As shown in Table 10, there was not a relationship between age and using the web to access news. Both digital natives and digital immigrants demonstrated frequent use of web-based resources to access news; 95 percent of digital natives used the internet to access news (*n* = 173), and 93 percent of digital immigrants also used the internet for this purpose (*n* = 121) = 2.1, p > 0.5. Comedy television was popular among digital natives, whereas network television was popular with digital immigrants. Similarly, both digital natives and digital immigrants reported using the internet as the first step toward educating themselves on political causes (*n* = 286). Digital immigrants (*n* = 115) were more likely to seek out person-to-person conversations and reference print sources than digital natives (*n* = 171); 20 percent of digital immigrants used non-web sources, whereas 9 percent of digital natives reported using sources other than social networking or web-based research (Table 12). However, this was not statistically significant, as both digital natives (*n* = 171) and digital immigrants (*n* = 115) largely favored the internet as a first step for researching a political cause, (*n* = 276) = 6.8, p > .05.

Table 10

Preferred outlet for accessing news

Outlet	*n*	% of DN	% of DI	X^2
Web	277	95	112	
Television	13	4	5	2.1
Print	4	1	3	

Note. DN = digital natives; DI = digital immigrants.

Table 11

Preferred outlet when first researching a political cause

	n	% of DN	% of DI	*X²*
Post on social networking	23	7	10	
Look up online	222	83	70	
				6.8
Discuss in-person	34	8	17	
Consult print resource	7	2	3	

Note. DN = digital natives; DI = digital immigrants.

Summary of Results

Ultimately, age did indicate some major differences in habit, specifically in the use of social networking. Digital natives were more likely to participate passively in political discussions, whereas digital immigrants favored more active means. Digital natives are also more mobile than digital immigrants, but many participants from both groups still used a mix of mobile and stationary devices. The results also revealed that the internet is a prevalent political resource for both digital natives and digital immigrants. Digital natives and digital immigrants alike use the web to access news and information.

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Discussion

</div>

Summary of the Problems and Purpose of the Study

This study sought to determine how digital natives engage in political activism using the web, and how these habits differ from digital immigrants. The web offers many resources, so the researcher targeted specific outlets based on previous scholarship in the field such as online petitions; social networking; forums; and online news access. Because politics are becoming

increasingly more driven by the web, it is important for researchers to understand what this means for the future of political activism and the demographic leading these changes (Kerton, 2012; Neumayer & Raffl, 2008; Rotman et al., 2011; Sivitanides & Marcos, 2011).

Interpretation of the Findings

Several themes emerged in the results. Digital natives used computers and the internet on average several years earlier than digital immigrants, given that digital natives are exposed to technology at much younger ages. Thus, digital natives closely relate web activity to their in-person identity. Despite engaging in more passive forms of activism, digital natives identified as activists similarly to digital immigrants. This implies that digital natives view activism differently from digital immigrants, suggesting that they view discussion and content sharing on social media as effective end-means (Joyce, 2010).

Digital immigrants and digital natives alike were active in signing petitions. Many responses cited specific websites and specific causes. Digital natives used a multitude of petition sites, from the popular Change.org to forms created on cause websites. Internet causes, such as the recent Stop Online Piracy Act (SOPA) bill, were mentioned frequently by digital natives in the question's text box. Digital immigrants who chose to include causes in their response frequently mentioned petitions on environmental, human rights and gun control. These responses indicate the potential for further investigation about how cyberactivism occurs within specific political movements (Amin, 2010).

Because digital natives are interested in causes that impact the freedom and integrity of the internet, this shows that their perspective on using passive web-based activism might actually be the preferred approach to fighting for that cause (Croeser, 2012). This is not to say

that digital natives only stated internet causes: human rights, gay rights, women's rights, anti-bullying campaigns and gun legislation (for or against) were also mentioned often.

However, while the results showed that digital natives and digital immigrants both signed online petitions, several participants expressed doubts at the action's effectiveness. Two participants in particular—one born in 1989, the other born in 1992—expressed disillusionment with online petitioning.

> *I'm sure I've signed a petition… couldn't tell you what it was for. I don't sign them anymore, because I don't think the online ones really accomplish anything.* – survey participant, age 24.

> *Some time ago I signed something with the impression it would actually do something*. – survey participant, age 21.

None of the digital immigrants in the study expressed these doubts. One possible explanation for this is that digital immigrants see online petitions as a part of activism, not the only act necessary, and are more likely to look for results based on real-world changes. While digital natives often expect to see results just from web-based actions, this indicates that some digital natives may become frustrated with the absence of results (Crisco, 2009; Joyce, 2010; McCafferty, 2011).

Use of social media differed greatly between digital natives and non-digital natives. Facebook is most popular with people age 18-29, so it was unsurprising that both groups used Facebook in some capacity. Twitter also has the same prominent demographic, but less users than Facebook (Rotman et al., 2011). Forum use was also evenly distributed.

The difference was in how these tools are used—digital natives preferred passive means of social media activism, "liking" a Facebook status as opposed to sharing an article on Facebook. Tweets on Twitter were often retweeted, but not posted—thus indicating that digital natives feel comfortable sharing content already posted on a social network, but less so sharing an article they found interesting or impactful. Digital immigrants, while also active on social networking, were more interested in incorporating in-person components to the activist process. That they also preferred active means of sharing indicates that they may possess a confidence in their political beliefs and opinions more so than digital natives (Rosen, 2010; Zur & Zur, 2011). This is due partly in how digital natives and digital immigrants view social networking; because digital natives view social networks as a legitimate form of friendship and communication, they are less likely to start debates in the interest of preserving their networks (Kaplan & Haenlein, 2010).

Ultimately, with the development of new mobile and social technologies, cyberactivism is likely to continue transforming within the political sphere with digital natives at the helm, potentially impacting other civic activities, such as elections (Kolsaker, 2008; Vitak, Zube, Smock, Carr, Ellison & Lampe, 2011; Youmans & York, 2012). Since Occupy Wall Street and the Arab Spring—and more recent protests in Syria, Turkey and Greece—there have also been indications that digital natives and digital immigrants are revisiting social networks as tools during political movements, favoring more active means for local protests and more passive means for global awareness (El-Nawawy & Khamis, 2012; Youmans & York, 2012).

Limitations of Present Study

Upon analysis of the data, several flaws of the survey instrument became apparent. Although each question was derived from the theoretical framework, some of the questions opened up new questions away from the original hypothesis. Allowing participants to indicate more specific ranges using a Likert scale would have been more effective to better understand the frequency of the habits questioned in the survey. For instance, participants were asked *how* they access the news, but not how *often*—this data would have been beneficial to interpreting the participants' habits, particularly as cyberactivism behaviors are influenced by the amount of time digital natives spend on the web (Amin, 2010; Boulianne, 2009).

A trend in new research on cyberactivism focuses on a specific tool—for instance, online petitions, the use of hashtags to track news, and liveblogging. A broader approach was taken in this study when constructing the survey instrument, one which used the existing literature. However, this is a rapidly developing field, and, while in the process of conducting this research, more research has emerged which would inform the development of updated research questions. Furthermore, because this data is intended to be placed in a larger context of technology and political activism, more inquiries about time, usage and attitude would have provided a sounder foundation to build upon. The primary investigator intends to develop the survey for future research.

Implications for Future Research

This study opened up several areas in need of additional research. One area of importance includes examining the differences in perception toward cyberactivism between participants in Occupy Wall Street and Arab Spring; because characteristics of digital natives

varies based on location, it is clear that geography plays a role in how social media is used during political movements. Beyond this potential study, there are several additional areas in need of further inquiry. The first is investigating the impact of particular outlets, specifically livestreaming, social media, and online petitions, as activist tools. Based on the feedback given in the survey, many cyberactivists remarked on the effectiveness (or lack thereof) of online petitions, and this is quickly becoming a popular branch of study within social technology research. Also, the indications of digital natives as passive participants should be researched with controlled populations, to determine if this is truly reflective of digital natives as a population. As such, digital immigrants who prefer more active forms of political participation may begin feeling alienated by the trends of cyberactivism. This is an opportunity for researchers to determine how digital immigrants can better use their action-based approach to activism on the web, while subsequently discovering how digital natives passivity can be applied to more action-based participation.

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Appendix A

Survey of Cyberactivist Habits

Cyberactivist habits among digital natives

Hello! My name is Ashley Hennefer and I am a graduate student in Literacy Studies, Department of Educational Specialties, in the College of Education. This survey will be used for my research project about cyberactivism. If you have any questions or comments, feel free to email me at ashleyhennefer@gmail.com. All of your responses are anonymous and confidential. Thank you for your participation in my project!
* Required

What year were you born? *

[   ]

2. Indicate your level in college. *
If you are not a student, indicate highest level completed.

○ Freshman

○ Sophomore

○ Junior

○ Senior

○ Did not attend college

○ College Graduate

○ Graduate Student (Master's/PhD)

○ Other: [   ]

3. How old were you when you first used a computer?

[   ]

4. How old were you when you started using the Internet?

[   ]

5. Have you ever used a website, such as Change.org or ThePetitionSite.com, to create or sign a petition? If so, briefly provide context for the situation--what website was used and what kind of petition you created or signed.

[   ]

6. Do you consider yourself an activist or one who is involved in advocacy for a particular cause?

○ Yes

○ No

○ On occasion

○ Only for a specific issue

Please indicate if you have done any of the following:

☐ "Liked" a political post on Facebook

☐ Posted a political article on Facebook

☐ Posted a political article on Twitter

☐ Contributed to a political web forum

☐ Planned a protest using Facebook and/or Twitter

☐ Retweeted a political article or opinion on Twitter

☐ Other: [   ]

How often do you participate in political discussions online?

○ Never

○ Rarely

○ Occasionally

○ Often

○ Frequently

○ Other: [   ]

How do you participate in web-based political discussion? You may select more than one.

☐ With my smartphone

☐ With my tablet

☐ With my laptop

☐ With my desktop computer

☐ Other: _____

9. **When you need to access news quickly, where do you go first?**

☐ Network television

☐ Comedy television

☐ Twitter

☐ Facebook

☐ Radio

☐ Magazines

☐ Web magazines

☐ RSS feeds

☐ Reddit or other news aggregators

☐ Forums

☐ Newspapers

☐ Other: _____

When getting involved in a political cause, what do you do first?

○ Research the topic for more information online

○ Research the topic using books, newspapers or magazines

○ Create a petition online

○ Start a discussion on a forum

○ Post a status update on Facebook

○ Tweet about it on Twitter

○ Create a petition for people to sign in-person

○ Discuss the issue with others in-person

Submit

Never submit passwords through Google Forms.