News Consumption Revisited: Examining the Power of Habits in the 21st Century

Abstract

The Internet's ability to revolutionize journalism has long been examined and contested. From an Audience Studies perspective, one central question arises-- Does the Internet promote different kinds of news consumption behaviors online? This study suggests that habits are one of the predominate factors influencing offline news consumption behaviors, and that habits are shaped by the larger media environment with which one grew up in (i.e., One who grew up in the era where print newspapers dominated the media landscape will remain print newspaper readers in adulthood). More importantly, that people's online news consumption behaviors largely mirror their offline news consumption habits (i.e., newspaper readers predominately visit newspaper websites). Habitual news consumption calls into question the myth of news information democratization in the 21st century, and suggests that the future of the news industry can be revived by cultivating desirable news consumption habits among adolescents.

Angela M. Lee
Ph.D. Candidate
Annenberg School for Communication
University of Pennsylvania
alee@asc.upenn.edu

Michael X. Delli Carpini
Dean
Annenberg School for Communication
University of Pennsylvania
mxd@asc.upenn.edu

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Introduction

There has long been optimism among the first wave of online journalism studies in the 1990s on how the Internet opens up possibilities for a new phase in journalism where citizens are no longer "limited by the small number of broadcast channels or local publications available in their local area" (Hindman, 2007,p. 330), and where information is liberated with Internet's cheap and efficient distribution power. As Quandt (2008) documents, there were initially hopes that the Internet would "change the face of journalism": Researchers and the public expected a "revolution" (Stephens, 1998), "future of journalism" (Pavlik, 1999), or, following Quittner's visionary article, "a whole new journalism" (1995). Undoubtedly, with new medium comes new possibilities, and the Internet's success at democratizing politics and expanding the public sphere is apparent to a certain extent (Hindman, 2008). Nonetheless, what the field needs to do now is to take a closer look at the formation, as well as influence, of news consumption behaviors both in traditional media and on the Internet. Moreover, the central question remains – How does the Internet make a difference in journalism and news consumption?

The New Era: Journalism in Transition

In the age of digitization, the Internet is changing the way people live and interact with each other. As Hindman (2007) documents, "Seventy million Americans now log on to the Internet in a typical day, reading news, checking e-mail, and engaging in a host of other online activities" (p. 327). With rapid changes and Internet-use diffusion (Lin, Salwen, Garrison & Driscoll, 2005) come the need for businesses and institutions to "refine old rules and create new ones" (Ebo, 1998; Dibean & Garrison, 2007, p. 269). One of the institutions that are heavily affected by

the rise of the Internet over the past decade is journalism. In Garrison's (2005) words,

"The Web and online newspaper world is in transition... Technology has too much impact on the medium for it to remain static. With technological advances such as the spread of broadband into homes and new multimedia opportunities, online newspaper will evolve as they have done in the first decade of the existence of the Web" (p. 42).

Not only is journalism evolving in the face of technological advancements, but also people's news consumption habits are changing as Internet penetration skyrockets over the past two decades (Lin, Salwen, Garrison & Driscoll, 2005). As Tewksbury (2003) asserts, "new technologies are changing the nature of news reading and providing new opportunities for studying that behavior" (p. 695). In speculating about the future and impact of journalism, as well as the nature of the Internet, it is important to examine both institutional (i.e., news production and distribution) and individual (i.e., news consumption habits or patterns) changes that come with digitization.

A number of studies have explored the impact that the Internet has on news consumption (as will be discussed in the next section). To contribute to this literature, this study examines the role habits play in news consumption of both traditional and Internet-based news.

Online News: "Old Wine in a New Bottle?"

From a structural perspective, online news websites still largely retain the presentation style of their traditional counterparts (Lee, 2008). Moreover, traditional newsrooms still supply most of the information on dominant news websites (i.e., nytimes.com or cnn.com) (see Salwen, 2005; Dibean & Garrison, 2005; Weldon, 2008; Quandt, 2008; Hindman, 2008). According to Lin, Salwen, Garrison & Driscoll

(2007), this content convergence is the result of news media's adopting a "blanket-marketing" strategy. In the hope to succeed in today's highly competitive media environment, blanket-marketing strategy "calls for the embracing of all potential outlets to deliver the news media's content, by establishing any and every possible ancillary channel" (p. 250). With only limited resources and news content on any given day, the only practical way for established news entities to do so is to create "shovelware" (e.g., Marlatt, 1999; Cochran, 1995; Barnhurst, 2000; Salwen, 2006; Hoffman, 2006; Dibean & Garrison, 2007) where the same information is "copy-and-pasted" across different media (Quandt, 2004; Quandt, 2008). As Hindman (2008) asserts,

"Of the nation's two hundred most widely circulated newspapers, all now publish their content on the World Wide Web, either on their own websites or on a site shared with another news organization. With only a handful of exceptions, newspaper websites overwhelmingly present the same articles, prepared by the same staff, as the paper's print edition" (p. 97).

Illustratively, Weldon (2008) finds that all of the "most-read" news articles on the website of *New York Times* on December 14, 2006 were "shoveled to the website from the print version. Moreover, Robinson (2007) finds that print newspapers provide as much as ninety percent of news content on the Internet. As the Internet becomes the extension, rather than revolution, of traditional news media (Ahlers, 2006), and with traditional news media's dominance on the Internet (Tewksbury, 2003), online diversity of news content is "astonishingly shallow" (Hindman, 2007). Furthermore, the extent to which the Internet changes (or not) "what" (e.g., news topics; also see Lin, Salwen & Abdulla, 2005) and "how" (e.g., online news sources) people consume news needs to be reevaluated in today's media environment.

(New) Theory of Media Attendance: Habits and News Consumption

According to the new theory of media attendance, people often lapse into *habitual* patterns of media consumption when confronted by a myriad of media choices in order to conserve mental resources (LeRose & Eastin, 2004; Diddi & LaRose, 2006), or to satisfy their "chronic or recurring needs" (Tewksbury, Hals & Bibart, 2008, p. 258). Media attendance theory suggests that most news consumers proactively seek news coverage from the same sources that they consume in traditional media due to the "self-reinforcing aspect of *habitual behavior*" (Rosenstein & Grant, 1997, p. 326; emphasis added), and that it is possible that the same offline news consumption habits are carried onto the Internet.

In describing habits, Martin (2008) comments:

"Habits can be simple or complex behaviors. They are learned slowly over time through repetition... When a habit is formed, it can be executed with little or no conscious intervention. A habit might become dormant, but it does not disappear-- instead, it hides, like a sleeper agent ready to be awakened" (p.34).

The idea that people develop media use habits has long held currency among Communication researchers; however, it has often been omitted in empirical studies (Rosenstein & Grant, 1997). For example, while there exist discussions of the connection between habits and news consumption (e.g., Tewksbury, 2005), "habitual news consumption" has never been operationalized nor examined prior to this study. In fact, as far as general media consumption goes, habits are more often discussed in the Uses & Gratifications literature as one variation of "gratifications," and are hence not directly examined (e.g., Rubin, 1984; Didi & LaRose, 2006). Following Rosenstein & Grant's approach (1997), this study treats habit "as an integral part of

the process underlying the creation of individual media dependency relationships" (p.324).

Habits, "an activity that is routinely performed" (Rosenstein & Grant, 1997, p. 338), are often formed early on in one's life. According to Stone & Wetherington (1979), for example, newspaper-reading habits are often "fixed by the time a person reaches late teens" (p. 561). Extending this line of reasoning, this study argues that people's news consumption patterns (both the medium of choice—i.e., print, television/radio, or Internet; and, within Internet use, the particular sites they use—e.g., newspaper sites, TV news sites, untraditional sites like *Slate*)—are determined by the habits they developed during adolescence and young adulthood. These habits are not only determined in part by personal and family factors (Stone & Wetherington, 1979), but also by the larger media environment in which they grew up.

Habits & Digital Divides. Contemporary Americans have, depending on their age, grown up in three different news media and technological environments.

Adopting Palfrey & Grasser (2008)'s model of digital divides, the three cohorts used in this study are Digital Natives, Digital Immigrants, and Digital Settlers:

Digital Natives (Age 18-29) are those who were born after the 1980's. They grew up in an environment where print news is less central, TV/Radio news is influential but declining, and Internet news is becoming more central. Moreover, major aspects of their lives are mediated by digital technologies. Arguably, growing up with the advent of the Internet, Digital Natives are the natural inhabitants of modern media environment, and are hence more likely to rely on the Internet for most of their daily activities, including news consumption.

Digital Immigrants (Age 30-64) are those who grew up in an era when while print news was still important, television and radio news dominated, and Internet

news was emerging. Most of the Immigrants learned to use the Internet at a later point in life. From a habitual standpoint, Digital Immigrants are more likely to rely on television and radio for news consumption, as these are the most prominent news media with which the Digital Immigrants grew up with.

Digital Settlers (Age 65+) are those who grew up in an analog-only era where print news dominated, and television and radio news was on the rise. Unlike the other two cohorts, Digital Settlers grew up with print newspapers dominating the news landscape. Consequently, they are also the cohort that arguably developed the habits of consuming news from print newspapers as opposed to television, radio, or the Internet.

The authors propose two ways in which habits dictate news consumption behaviors. Firstly, the primary news medium that one grew up with, which is arguably the most prominent or accessible news medium during the time in which one grew up, will remain the primary news medium, as well as the most frequented medium, that one habitually chooses for news in adulthood. Secondly, and most importantly to our argument, the specific websites or sources in which one accesses news on the Internet will be influenced by one's offline habits – that is, online news media consumption patterns should mirror offline consumption patterns, with newspaper readers more likely to visit newspaper websites, television news viewers more likely to visit television news websites, and so forth.

Hypotheses

Based on the logic of how and when media habits develop, and the very different media environments in which different age cohorts developed these habits, we hypothesize that Digital Natives, Digital Immigrants, and Digital Settlers will demonstrate different patterns of news media use in the

contemporary media environment. Specifically, the authors use the first two sets of hypotheses to examine primary news medium choices, and the last set of hypotheses to explore the extent to which online news consumption patterns mirror that of offline:

H1: Adult's primary source of news will vary systematically and predictably by age cohort:

H1a: Digital Settlers will be more likely to choose print newspapers as their primary news source than other age cohorts.

H1b: Digital Immigrants will be more likely to choose offline TV as their primary news source than the other age cohorts.

H1c: Digital Immigrants will be more likely to choose offline Radio as their primary news source than other age cohorts.

H1d: Digital Natives will be more likely to choose the Internet as their primary news source than other age cohorts.

H2: The relative frequency of offline print, offline TV/Radio, or Internet news consumption will vary systematically and predictably by which age cohort:

H2a: Relative to other age cohorts, Digital Settlers will be more likely to use print newspapers than other news sources.

H2b: Relative to other age cohorts, Digital Immigrants will be more likely to use offline television news than news sources.

H2c: Relative to other age cohorts, Digital Immigrants will be more likely to use offline radio news than other news sources.

H2d: Relative to other age cohorts, Digital Natives will be more likely to use Internet news than other news sources.

H3: Among those who consume news online, the specific websites one turns to will be influenced by ones offline consumption habits:

H3a: Digital Settlers will be more likely to visit websites of traditional print news organizations than other age cohorts.

H3b: Digital Immigrants will be more likely to visit websites of traditional TV news organizations than other age cohorts.

H3c: Digital Immigrants will be more likely to visit websites of Radio

news organization than other age cohorts.

H3d: Digital Natives will be most likely to visit websites of non-traditional news organizations than other age cohorts.

H3e: Digital Natives will visit a greater variety of news websites than other age cohorts.

Data & Method

Data

This study is based on secondary analysis of the "Biennial Media Consumption Survey 2008" (BMCS) conducted by the Pew Research Center for the People & The Press. The survey was given to a nationally representative sample of 3,600 adults (18+) from April 29 to May 31, 2008. The interview was done over landlines (N= 2,800) and cellular phones (N= 800). A brief overview of the sample is as follows: The mean age of the sample is 50.05 (SD=17.70), and 50.3% of the sample is male. Median education is "some college," and the mode is "high school graduates." 82.8% of the sample is White, 10.2% Black, 1.9% Asian, and 5.1% "Other of mixed race."

In order to measure respondents' offline and online news media consumption we used the following questions from the BMCS. To measure people's primary news medium choices, the authors used the question: "Thinking about a typical weekday overall, do you get most of your news: from television, print newspapers, the radio or the Internet? [If respondent names more than one source, probe with: If you had to say just one, which one is your main source of news?]." Coded responses included television, newspapers, radio, the Internet, other, and don't know/refused (N= 3413).

Relative frequency of news media use was measured using the following

¹ For complete description of the data and survey, see: http://people-press.org/reports/questionnaires/444.pdf

question: "Do you happen to [read any daily newspapers or newspapers (N=3519) / watch any TV news programs (N=3523) / listen to news on the radio (N=3522) / regularly, or not?" [Emphasis added]. Responses were coded as "yes" (habitual use) or "no." Frequency of Internet news use (which was asked separately and only to respondents who used the Internet) was measured using the following question: "How frequently do you go online to get news?" Choices ranged from "every day," "3-5 days per week," "1-2 days per week," "once every few weeks," "less often," "no/never" to "don't know/refused. To make comparable to the questions asked about offline news media consumption, the authors dichotomized responses by coding "every day," "3-5 days per week," and "1-2 days per week" as regular (habitual) use, and "once every few weeks," "less often," "no/never" and "don't know" as non-regular or non-habitual use (N= 1676).

Finally, respondents' specific online news media consumption was measured using the following open-ended question (which was asked *only* of those who reported consuming online news: "What websites do you use to get news and information? Just name a few of the web sites that you go to the most often. [Open end; code up to three responses]." Respondents' first answer was then recoded into one of the following categories: Print newspapers (which includes national and local newspapers), TV news (which includes broadcast national/local news, and cable national/local news), radio news, and "untraditional" news sources (i.e., portals, aggregates, blogs, and alternative news sites such as *Slate*, *Drudge*, *Digg and The Huffington Post*) (N=485).

Operationalization of Cohorts

Adopting Palfrey & Grasser (2008)'s model of digital divides, *Digital*Natives are those between the age of 18-29, Digital Immigrants are those between the age of 30 and 64, and Digital Settlers are those older than 65.

Method

All statistical analyses were performed using SPSS version 17. The independent variable in these analyses is "age cohort," defined as being a Digital Native (18 to 29) Digital Immigrant (30 to 64) or a Digital Settler (65 and older). Due to the nature of the data, Logistic Regression Analysis is the most appropriate and powerful statistical test. Consequently, all of the analyses were done using Logistic Regression Analysis² by dichotomizing the dependent variables (Primary news medium choice, frequency of news medium usage, online news use, and number of online sources given). The control variables are race, gender, education and income³.

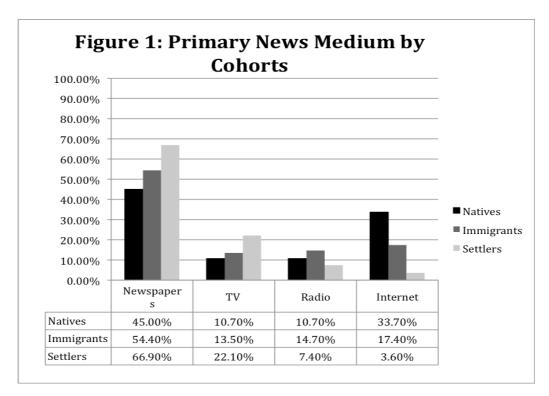
Results

Supporting H1, and as indicated by Figure 1, primary news medium use varied significantly by age cohort (X^2 [6, N = 3413] = 266.65, p< 0.005), and the order of these differences is also significant, γ = -0.317, p<0.001. Moreover, in trying to get an even better understanding of habitual news consumption behaviors across different age cohorts, the authors further broke Digital Immigrants into "Young Immigrants" (age 30-47) and "Senior Immigrants" (age 48-64) based on the assumption that Digital Immigrants, the cohort with the largest age span and sample size, grew up in the era where television gradually but steadily took over the news media landscape where print newspapers once dominated. This additional analysis reveals that not only

² Chi-squares, Gamma, and Linear Regression (OLS) analysis were also performed, and all of the findings yield the same conclusion as that of Logistic Regression Analysis

³ These are standardized control variables that are often used to account for differing news consumption behaviors and Internet usage (e.g., See Stone & Wetherington, Jr., 1979; Chyi & Sylvie, 1998; Poindexter, 1979; Veenstra, 2007; Ferguson & Perse, 2000; Bergstrom, 2006, etc.)

do the overall primary news consumption patterns across the age cohorts remain identical, but also the statistical support for this hypothesis becomes even stronger. $[X^2 (9, N=3413)=392.92, p<0.001], \gamma=-0.319, p<0.001.$



Supporting H1a, more Digital Settlers (61%) choose print newspapers as their primary news source than Digital Immigrants (46%) or Digital Natives (45%). Moreover, in comparison to Digital Settlers, logistic regression analysis suggests that Digital Natives have 64% lower odds, or likelihood, of choosing print newspaper as their primary news medium, whereas Digital Immigrants have 31% lower odds of choosing print newspapers as their primary news medium (Also see Table 1 in Appendix A).

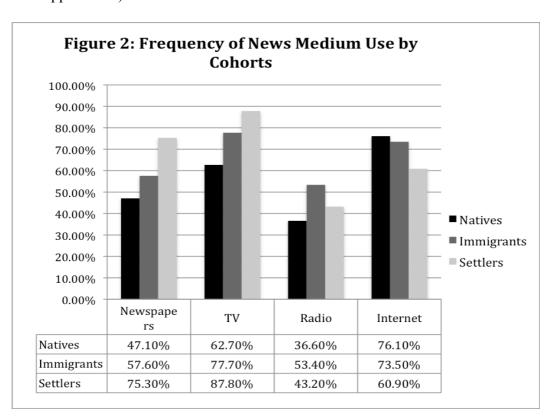
Unsupportive of H1b, more Digital Settlers (16%) choose offline TV to be their primary news source than Digital Immigrants (10%) or Digital Natives (11%). On the other hand, in comparison to Digital Immigrants, logistic regression analysis suggests that Digital Natives have 23% lower odds of choosing TV as their primary news source, whereas Digital Settlers have 90% higher odds of choosing TV as their

primary news source (Also see Table 2 in Appendix A).

Supportive of H1c, more Digital Natives (17%) choose offline radio to be their primary news source than Digital Settlers (13%) or Digital Natives (11%). Moreover, in comparison to Digital Immigrants, logistic regression analysis suggests that Digital Natives have 22% lower odds of choosing radio as their primary news medium, whereas Digital Settlers have 62% lower odds of choosing radio as their primary news medium (Also see Table 3 in Appendix A)

Supportive of H1d, more Digital Natives (34%) choose Internet news as their primary news source than Digital Immigrants (27%) or Digital Settlers (10%).

Moreover, in comparison to Digital Natives, Digital Immigrants have 71% lower odds of choosing the Internet as their primary news medium, whereas Digital Settlers have 95% less odds of choosing the Internet as their primary news medium (Also see Table 4 in Appendix A)



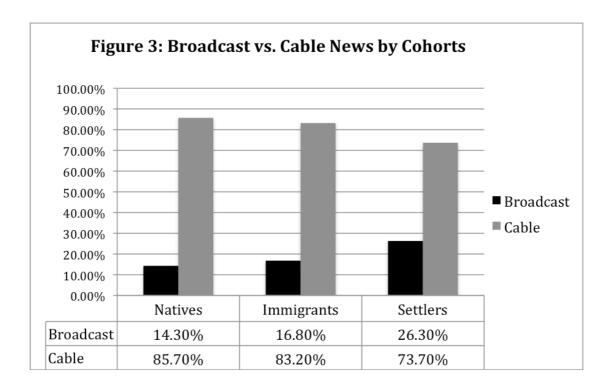
Supporting H2, and as Figure 2 above shows, habitual use of news media, as

measured by frequency, significantly differ depending on the cohorts in which one is in, $[X^2(2, N = 3519) = 118.18, p < 0.001], \gamma = -0.340, p < 0.001.$

Supporting H2a, Digital Settlers (75 %) are significantly more likely to habitually consume news from print newspapers than Digital Immigrants (58%) or Digital Natives (47.1%) Moreover, in comparison to Digital Settlers, logistic regression analysis suggests that Digital Natives have 74% lower odds of frequenting print newspapers for news, whereas Digital Immigrants have 67% lower odds of frequenting print newspapers for news (Also see Table 5 in Appendix A).

Unsupportive of H2b, Digital Settlers (88%) are significantly more likely to habitually consume news from offline TV than Digital Immigrants (78%) or Digital Natives (62.7%). On the other hand, in comparison to Digital Immigrants, logistic regression analysis suggests that Digital Natives have 50% lower odds of frequenting TV for news, whereas Digital Settlers have 170% higher odds of frequenting TV for news (Also see Table 6 in Appendix A). Suspecting habitual differences within television usage, the authors performed a post hoc analysis that broke offline television news usage further into "broadcast" versus "cable". Since broadcast television news has been around for longer than cable news, older people are hypothesized to rely more on broadcast television news, and younger people are hypothesized to rely more on cable television news. While no significant results were obtained, which is unsurprising due to the small sample size (N=271), there is a suggestive increase in habitual broadcast television news uses (ABC, NBC, CBS) among natives (14%), immigrants (17%), and settlers (36 %), and decrease in habitual cable television news uses (CNN, MSNBC, ESPN, CNBC, FOX, BBC⁴) among settlers (86%), immigrants (83%), and natives (74%) (Also see Figure 3).

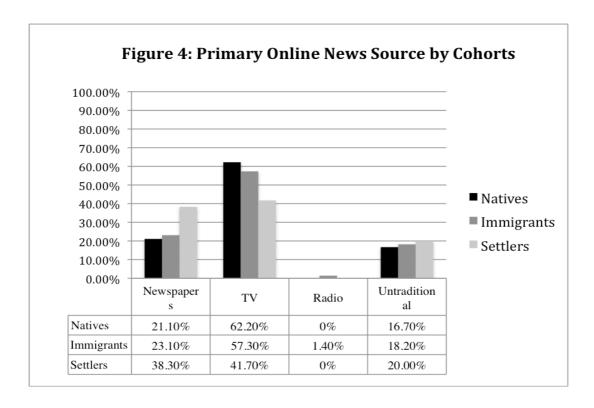
⁴ BBC is only provided by cable service in the U.S.



This lends support to the habitual news consumption argument in that the medium in which one grew up using remains the primary news medium throughout one's life due to the formation and subsequent influence of habits.

Supporting H2c, Digital Immigrants (53%) are significantly more likely to habitually consume news from radio than Digital Settlers (43%) or Digital Natives (37%). Moreover, in comparison to Digital Immigrants, logistic regression analysis suggests that Digital Natives have 38% lower odds of frequenting radio for news, whereas Digital Immigrants have 23% lower odds of frequenting radio for news (Also see Table 7 in Appendix A).

Supporting H2d, Digital Natives (76%) are significantly more likely to habitually consume news from the Internet than Digital Immigrants (74%) or Digital Settlers (61%). Moreover, in comparison to Digital Natives, Digital Immigrants have 39% lower odds of frequenting the Internet for news, whereas Digital Settlers have 64% less odds of frequenting the Internet for news (Also see Table 8 in Appendix A).



The last set of hypotheses examines the extent to which online news consumption habits are influenced by offline news consumption habits. H3 is not statistically supported, possibly due to the relatively small sample size (N= 485). Nonetheless, interesting patterns do emerge from these analyses (Also see Figure 4).

Supporting H3a (N= 117), Digital Settlers (38%) are more likely to visit newspaper websites⁵ for news than Digital Immigrants (23%) or Digital Natives (21%). Nonetheless, Logistic regression analysis does not provide statistically significant support for this hypothesis. Illustratively, in comparison to Digital Settlers, Digital Natives have 56% higher odds of visiting newspaper websites (p=0.24), whereas Digital Immigrants have 25% higher odds of visiting newspaper websites (p=0.46) (Also see Table 9 in Appendix A).

⁵ Which include the top 25 established newspapers in the U.S. (e.g., *New York Times, Wall Street Journal, Los Angeles Times, USA Today*), local newspapers (e.g., *Philadelphia Inquirer, St. Louis Post-Dispatch, Muskogee Daily Phoenix*), and foreign newspapers (e.g., *La*

Monde, The Guardian, The Paris News)

Unsupportive of H3b (N= 274), Digital Natives (62 %) are more likely to go to TV news websites⁶ for news than Digital Immigrants (57%) or Digital Settlers (42%). On the other hand, in comparison to Digital Immigrants, logistic regression analysis suggests that Digital Natives have 51% higher odds of visiting TV news websites, whereas Digital Settlers have 71% lower odds of visiting TV news websites (Also see Table 10 in Appendix A). To better understand the phenomenon found among television news website consumptions, content analysis revealed that CNN, MSNBC and Fox account for nearly 70% of all television news websites that online TV news consumers (N= 277) report as their primary news source.

Supporting H3c (N=5), Digital Immigrants (1%) are more likely to go to radio news websites⁷ for news than Digital Natives (0%) or Digital Settlers (0%). Nonetheless, logistic regression analysis does not provide statistically significant support for this hypothesis (Also see Table 11 in Appendix A).

Unsupportive of H4d (N=89), while the differences are very small, slightly more Digital Settlers (20%) visit "untraditional" news sites⁸ than Digital Immigrants (18%) or Digital Natives (17%). Additionally, logistic regression analysis does not provide statistically significant support for this hypothesis (Also see Table 12 in Appendix A).

Supporting H3e, significantly more natives (29%) report a greater variety of

⁶ Which include national TV broadcast (e.g., *ABC*, *CBS*, *NBC*), national public service (e.g., *BBC*), national TV cable (e.g., *FOX*, *CNN*), local TV (e.g., *6 ABC*, *CBS 3*), and talk shows (e.g., *The Today Show*, *The O'Reiley Factor*)

⁷ Which include *Rush Limbaugh and NPR*.

⁸ Which include sites like *Digg*, *Slate*, *Drudge*, *Topix*, *Blackamericaweb*, *Charter*, *Cox.net*. Search engines such as *Google*, *AOL*, *Yahoo*, *MSNBC* and *MSN* are eliminated from the analysis because the authors cannot be certain of what the respondent meant (i.e., if they use search engines to search for *New York Times* or a news topic that they are interested in).

primary online news sources than immigrants (27%) and settlers (11%). Moreover, in comparison to Digital Natives, logistic regression analysis suggests that Digital Settlers have 44% less odds of reporting more than one primary online news source (Also see Table 13 in Appendix A).

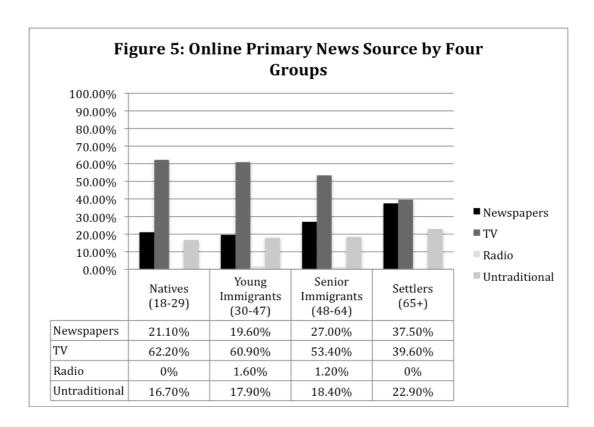
Discussion

Many people have noted that newspapers are losing younger audience, and that younger people are more dependent on the Internet for news in general.

Unsurprisingly, this generalized notion is supported by this study. As far as habitual news consumption goes; however, it is interesting that the theory predicts perfectly the use of news media among Digital Settlers, but less well Digital Immigrants and Digital Natives. This finding suggests that while habits are formed early on, the solidification of news consumption habits actually comes with time.

In support of the habitual news consumption theory, not only do most Digital Settlers choose print newspapers as their primary news medium, but they also are the most avid readers of online newspaper websites. Moreover, not only do most Digital Immigrants choose radio as their primary news medium, but they are also the most avid readers of radio newspaper websites. Furthermore, as expected, being the generation that grew up with the Internet, and that is the most familiar with the online interface, Digital Natives are more accustomed to visiting more than one online news sources for news information, as compared to Digital Immigrants and Digital Settlers. While the online sources in which Digital Natives visit are largely digitized counterparts of traditional news media, this pattern is suggestive of the future democratization of news information among younger generations. It is also interesting to note that when the authors re-ran analysis of online news consumption behavior by breaking Digital Immigrants further into Young Immigrants and Senior Immigrants,

Senior Immigrants' online consumption patterns are more similar to that of Digital Settlers than Young Immigrants. Conversely, Young Immigrants' online consumption patterns are more similar to that of Digital Natives than Senior Immigrants (See Figure 5). This phenomenon can be explained by the maturation process of the Internet over the past two decades, as well as the subsequent formation of necessary skills and habits to consume news online, as both Digital Natives and Young Immigrants started using the Internet at a much younger age than Senior Immigrants and Digital Settlers.



In interpreting online consumption of "untraditional news" among the three age cohorts, while the unexpected patterns certainly raise interesting questions for future research regarding online news consumptions, it should be remembered that the proportion of Digital Settlers who consumes news online is relatively small (about 6% of all Digital Settlers), and hence these respondents can be vastly different from typical Digital Settlers. In fact, this is also a question that research dealing with online

behaviors may run into – The fact that the Internet did not become conveniently accessible to the public until very recently (relative to traditional media) suggests that senior citizens who are also online users may be qualitatively different from its population at large. On the other hand, while it has been argued that Internet news users may be different from the general news population (Tewksbury, 2003), with the development and expansion of online journalism over the past five to ten years, and the fact that more people go online now than ever before, this concern is less applicable to Digital Natives and Digital Immigrants in this study.

Myth of Digital Democracy?

It is true that digital technology allows for "many different platforms and means of distributing news and content in a way that's more dynamic and diverse" (Michael Powell, in press); however, not only has Hindman (2008) found that traditional news media dominate the Internet through analyzing site traffic, but from an audience's perspective, this study also finds that most of the American public still proactively choose to consume news information online from sources that they have the habit of consuming in traditional media. In other words, just as Hindman suggests that "accessibility does not equate visibility" (also see Hargittai, 2007), this study finds that even if there is accessibility and visibility, take popular "untraditional" news sites such as *Slate* for example, if news consumers do not have the habits of seeking alternative news sources, the much acclaimed "digital democracy" is merited only in theory but not practice. Nonetheless, this study suggests that news consumption behaviors are habitual to a certain extent, and the encouraging thing about this finding is that habits *can* be molded, and that the future of the news industry can be determined by the news consumption habits in which youngsters grow up with. Moreover, these habits can be cultivated via proper education and media interventions specifically developed for youngsters.

Future Research

Future studies are encouraged to replicate this study with a larger online news consumer sample to further understand the American public's online news consumption behaviors, as the small online news consumers sample size is one of the major weaknesses of this study. Moreover, as this study implies, future studies are encouraged to develop media interventions and alike to encourage the development of habitual news consumption behaviors among youngster.

Conclusion

The conversation surrounding the future of news has always been a major focus in the field of Communication. For the important role that news media play in ensuring the functioning of democracy, especially in the United States, this conversation is unequivocally important. The Internet may heavily influence the future of American journalism, however, at best the Internet can only serve the interest of news consumers, and hence it is ultimately the news consumers that determine the fate of American commercial journalism.

This study proposes that media use habits are largely influenced by the media environment in which one grew up in, and suggests that habits dictate news consumption behaviors of the American public both in traditional media and on the Internet. Granted, the current media environment is still taking shape, younger generations' news consumption habits are still in development, and the future of the American news industry is uncertain. Nonetheless, with proper cultivation of news consumption habits among younger and future generations, the future of the American news industry may be more promising than its performance in the past decade suggests.

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Appendix A – Logistic Regression Analysis Tables

Table 1. Logistics regression analysis – Support for H1a (Newspapers)

Variables	OR	95%CI	
Cohorts			
Natives	0.37***	(0.28 - 0.48)	
Immigrants	0.69***	(0.56 - 0.85)	
Settlers (reference)			
Race (White=1)	0.79*	(0.64-0.97)	
Gender (Male=1)	1.43***	(1.22-1.67)	
Education	0.74***	(0.70 - 0.78)	
Income	0.95***	(0.91 - 0.99)	
Constant	7.31***		
Nagelkerke R-Sq.	0.12		
Chi-Square	264.55***		
df	6		
N	2864		

Note: **p*< 0.05; ***p*<0.1; ****p*<0.001

Table 2. Logistics regression analysis – Support for H1b (TV)

Variables	OR	95%CI
Cohorts		
Natives	0.77	(0.54 - 1.10)
Immigrants (reference)		
Settlers	1.90***	(1.49 - 2.44)
Race (White=1)	1.69**	(1.21 - 2.36)
Gender (Male=1)	0.89	(0.72 - 1.10)
Education	1.07	(1.00-1.15)
Income	1.05	(1.10 - 1.11)
Constant	0.06	
Nagelkerke R-Sq.	0.04	
Chi-Square	60.08***	
df	6	
N	2864	

Table 3. Logistics regression analysis – Support for H1c (Radio)

Variables	OR	95%CI	
Cohorts			
Natives	0.78	(0.55 - 1.10)	
Immigrants (reference)			
Settlers	0.38***	(0.26 - 0.55)	
Race (White=1)	1.10	(0.81 - 1.50)	
Gender (Male=1)	0.79*	(0.63-1.10)	
Education	1.18***	(1.09-1.28)	
Income	0.99	(0.93-1.05)	
Constant	0.10		
Nagelkerke R-Sq.	0.04		
Chi-Square	59.434***		
df	6		
N	2864		

Table 4. Logistics regression analysis – Support for H1d (Internet)

Variables	OR	95%CI	
Cohorts			
Natives (reference)			
Immigrants	0.29***	(0.22 - 0.37)	
Settlers	0.05***	(0.03 - 0.08)	
Race (White=1)	0.91	(0.69 - 1.19)	
Gender (Male=1)	0.71***	(0.57 - 0.88)	
Education	1.45***	(1.34-1.58)	
Income	1.10***	(1.03-1.15)	
Constant	0.11		
Nagelkerke R-Sq.	0.19		
Chi-Square	344.47***		
df	6		
N	2864		

Table 5. Logistics regression analysis – Support for H2a (Newspapers)

Variables	OR	95%CI	
Cohorts			
Natives	0.25***	(0.19 - 0.33)	
Immigrants	0.33***	(0.27 - 0.42)	
Settlers (reference)		,	
Race (White=1)	1.02	(0.83 - 1.25)	
Gender (Male=1)	0.89	(0.76-1.04)	
Education	1.14***	(1.08-1.21)	
Income	1.12***	(1.08-1.66)	
Constant	1.31		
Nagelkerke R-Sq.	0.10		
Chi-Square	214.14***		
df	6		
N	2859		

Table 6. Logistics regression analysis – Support for H2b (TV)

Variables	OR	95%CI	
Cohorts			
Natives	0.50***	(0.39 - 0.63)	
Immigrants (reference)			
Settlers	2.70***	(2.00-3.65)	
Race (White=1)	0.83	(0.65 - 1.06)	
Gender (Male=1)	1.07	(0.89 - 1.28)	
Education	0.98	(0.91 - 1.04)	
Income	1.08***	(1.04-1.13)	
Constant	2.77		
Nagelkerke R-Sq.	0.06	_	
Chi-Square	119.86***		
df	6		
N	2862		

Table 7. Logistics regression analysis – Support for H2c (Radio)

Variables	OR	95%CI	
Cohorts			
Natives	0.62***	(0.49 - 0.77)	
Immigrants (reference)			
Settlers	0.77**	(0.64 - 0.94)	
Race (White=1)	0.91	(0.74-1.11)	
Gender (Male=1)	0.81***	(0.70 - 0.95)	
Education	1.07***	(1.02-1.13)	
Income	1.19***	(1.08-1.13)	
Constant	0.64	,	
Nagelkerke R-Sq.	0.06		
Chi-Square	126.26***		
df	6		
N	2862		

Table 8. Logistics regression analysis – Support for H2d (Internet)

Variables	OR	95%CI
Cohorts		
Natives (reference)		
Immigrants	0.61***	(0.45 - 0.83)
Settlers	0.36***	(0.24 - 0.53)
Race (White=1)	0.81	(0.60-1.10)
Gender (Male=1)	0.73**	(0.57 - 0.88)
Education	1.24***	(1.15 - 1.34)
Income	1.12***	(1.06-1.18)
Constant	1.45	,
Nagelkerke R-Sq.	0.08	
Chi-Square	108.98***	
df	6	
N	1938	

Table 9. Logistics regression analysis – Support for H3a (Newspaper websites)

Variables	OR	95%CI	
Cohorts			
Natives	1.56	(0.75 - 3.27)	
Immigrants	1.25	(0.70-2.23)	
Settlers (reference)			
Race (White=1)	1.11	(0.63-1.97)	
Gender (Male=1)	1.19	(0.79 - 1.78)	
Education	1.54***	(1.30-1.83)	
Income	1.02	(0.92-1.13)	
Constant	0.00***		
Nagelkerke R-Sq.	0.05		
Chi-Square	40.04***		
df	6		
N	117		

Table 10. Logistics regression analysis – Support for H3b (TV news websites)

Variables	OR	95%CI
Cohorts		
Natives	1.51*	(1.06-2.15)
Immigrants (reference)		
Settlers	0.29***	(0.17 - 0.50)
Race (White=1)	1.16	(0.80 - 1.68)
Gender (Male=1)	0.95	(0.73 - 1.24)
Education	1.26***	(1.13-1.39)
Income	1.09*	(1.02 - 1.16)
Constant	0.02	
Nagelkerke R-Sq.	0.07	
Chi-Square	85.38***	
df	6	
N	274	

Table 11. Logistics regression analysis – Support for H3c (Radio news websites)

Variables	OR	95%CI	
Cohorts			
Natives	0.00	(N/A)	
Immigrants (reference)			
Settlers	0.00	(N/A)	
Race (White=1)	0.59	(0.06-5.39)	
Gender (Male=1)	5.50	(0.61 - 49.74)	
Education	0.88	(0.48-1.62)	
Income	1.67	(0.93 - 3.00)	
Constant	0.00		
Nagelkerke R-Sq.	0.14		
Chi-Square	10.40		
df	6		
N	5		

Table 12. Logistics regression analysis – Support for H3d (Radio news websites)

Variables	OR	95%CI
Cohorts		
Natives	0.81	(0.43-1.52)
Immigrants (reference)		
Settlers	0.66	(0.29- 1.50)
Race (White=1)	0.65	(0.37-1.12)
Gender (Male=1)	0.74	(0.47-1.19)
Education	1.15	(0.98- 1.36)
Income	1.11	(0.99- 1.25)
Constant	0.02***	
Nagelkerke R-Sq.	0.03	
Chi-Square	16.10*	
df	6	
N	89	

Table 13. Logistics regression analysis – Support for H3e (Variety of Online Sources)

Variables	OR	95%CI	
Cohorts			
Natives (reference)			
Immigrants	0.78	(0.58-1.04)	
Settlers	0.56**	(0.36-0.87)	
Race (White=1)	0.89	(0.67-1.19)	
Gender (Male=1)	0.95	(0.77-1.18)	
Education	1.22***	(1.12-1.33)	
Income	1.01	(0.96-1.07)	
Constant	0.17***		
Nagelkerke R-Sq.	0.03		
Chi-Square	33.62***		
df	6		
N	485		