Are "Digital Natives" Dropping Print Newspapers?
A National Survey of College Newspaper Advisers

Hsiang Iris Chyi, Ph.D.
Assistant Professor
School of Journalism
The University of Texas at Austin
Austin, TX 78712
Phone: (512) 471- 0553
Fax: (512) 471- 7979
E-mail: chyi@mail.utexas.edu

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Abstract

Simply because young adults are less likely to read a print newspaper compared with other age groups, many news professionals assume young people have lost interest in reading print newspapers. Although previous research has documented that most readers find the print newspaper to be more useful, satisfying, likeable, and enjoyable than its online counterpart, many within and outside the industry believe young people are an exception, and the way to retain "digital natives" is to pursue them online.

However, because no viable business model for online news has been found, it is important to re-visit some of the assumptions about young readers' attitudes toward online and print media. College newspapers provide a unique opportunity to examine such assumptions because most college newspapers publish in both online and print formats, and both formats are offered for free. Additionally, their readers are college students ages 18-22 (the so-called "digital natives"), all with Internet access.

A survey of 198 U.S. college newspaper advisers was conducted in 2011. The findings suggest that the print edition outperforms the Web edition in terms of readership and preference. The print edition generated the vast majority of advertising revenue. Print circulation and advertising revenue in most cases remain stable. And most college newspaper advisers do not believe an online-only model is realistic within the next five years. These results carry managerial implications for commercial newspapers as they envision the future of their industry.

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Simply because young adults are less likely to read a print newspaper compared with other age groups (Edmonds, Guskin, & Rosenstiel, 2011), most news professionals assume young people have lost interest in reading print newspapers (Kaufhold, 2010b). Newspaper firms thus allot substantial resources experimenting with multiplatform news delivery, hoping to retain young readers (Graybeal, 2011).

Although previous research has documented that most people find the print newspaper more useful, satisfying, likeable, and enjoyable than its online counterpart (Chyi & Chang, 2009; Chyi & Lasorsa, 2002; Chyi & Yang, 2009; De Waal, Schoenbach, & Lauf, 2005; Online Publishers Association, 2004), many within and outside the newspaper industry believed that young people are an exception, and the way to retain these "digital natives" is to pursue them online—through the Web, social media, or mobile apps. However, after 16 years of experimentation, no viable business model for online news seems to exist (Gill, 2011), it is therefore important to re-visit some of the widely accepted assumptions about young readers' attitudes toward online and print media. Specifically, do "digital natives" really prefer getting news online to reading the "dead-tree" edition of a newspaper?

This study reassesses such assumptions through a national survey of college newspapers because 1) most college newspapers publish in both online and print formats, 2) both formats are offered for free, and 3) their target readers are college students ages 18-22, all with Internet access (thus the so-called "digital natives"). Additionally, these college papers publish content

relevant to college students' lives. These scenarios provide a great opportunity to clarify the belief about young readers' format preference on the other-thing-being-equal basis.

Literature Review

Newspaper Consumption among Young Adults

It is not news that younger people are less likely to read print newspapers compared with other age groups. According to the Pew Research Center, 46% of those over the age of 65 reported reading a print newspaper yesterday. Among those ages 18-24, only 7 percent did so (Pew Research Center for the People and the Press, 2010, p. 14). Yet, the age differences in newspaper consumption patterns seem to have existed long before the Internet became a mass medium (Edmonds et al., 2011; Mindich, 2005; Prior, 2007). It is also not news that younger people are more likely to spend time online compared with other age groups. The 2011 Pew survey found 94 percent of U.S. adults age 18-29 used the Internet, while only 41% of those 65 or older did so (Pew Research Center's Internet & American Life Project, 2011).

Combining these two facts, it is easy to conclude that young people are dropping print newspapers in favor of online news sources. Indeed, a 2008 survey reported that 90% of the 322 journalists surveyed believed that young adults prefer online news to print news (Kaufhold, 2010b). This *Wired* magazine article provided a typical example hinting at the future (or demise) of print newspapers, saying, "What this world will look like is anyone's guess, but it probably won't include *The Washington Post* thudding on anyone's doorstep at 5 in the morning" (Penenberg, 2004). Such claims, coupled with more sophisticated arguments like Harvard business professor Clayton M. Christensen's disruptive technology theory (Christensen, 2003),

have largely shaped the newspaper industry's vision about the future (Chyi & Lee, 2012), in which digital media eventually dismantle current market leaders. Consequently, most newspapers have shifted a substantial amount of their dwindling resources from print to online. A recent survey of newspaper publishers indicated that the Web is their number one priority for attracting young readers (Graybeal, 2011).

David Mindich, author of the book *Tuned out: Why Americans under 40 don't follow the news*, was among the first to point out young people go online "for anything but news" (2005, p. 4). Some recent research findings also challenge the widely accepted assumption that young people use the Internet or mobile devices for *news purposes*. According to the Pew Research Center, while young people are most likely to incorporate technologies into their daily lives, they are *not* using these technologies to get news at higher rates than do older people (Pew Research Center for the People and the Press, 2010, p. 4). In other words, the real cause of the generational gap in news consumption may be a lack of interest in following the news, and technology alone is probably not an effective solution to the "news fatigue" ("Young adults suffering from news fatigue, study says," 2008) or "information surplus" (Chyi, 2009) problem. If that is the case, to pursue young readers by focusing on delivery technologies may be missing the point.

Additionally, given no viable business models have yet been discovered for local, general-interest news on the Web (Hindman, 2011; McDowell, 2011) or through mobile devices (Andrews, 2011), the technologically oriented approach currently undertaken by most newspapers may hinder the sustainability of the newspaper industry. It is therefore essential to reexamine the assumptions about young people's news-seeking habits and their attitude toward print and online media.

Format Preference: Print vs. Online

Previous research on users' preference for online vs. print news formats has yielded fairly consistent findings—most people find the print newspaper more useful, satisfying, likeable, and enjoyable than its online counterpart (Chyi & Chang, 2009; De Waal et al., 2005; Online Publishers Association, 2004). Additionally, a series of studies examined people's preference for print versus online newspapers on the "other things being equal" basis—that is, by asking people to choose their preferred format while holding key factors constant. Such studies also generated consistent results: Given the same content and the same price, the print edition of a newspaper is overwhelmingly preferred (Chyi & Chang, 2009; Chyi & Lasorsa, 1999, 2002; Chyi & Lee, 2012). In an attempt to explain why the performance of online news as a product has fallen short of expectations, Chyi and Yang (2009, 2012) explored the economic concept of "inferior goods"[1] and its applicability to online news. Their analyses of survey data collected by the Pew Research Center confirmed that online news is an inferior good among users.

However, to what extent different age groups perceive media formats differently has not received substantial scholarly attention. Yet, many describe young adults ages 18-24 as "digital natives." The term was coined by Marc Prensky in 2001 and was used frequently thereafter to refer to people who were born after the introduction of digital technology (Palfrey & Gasser, 2008). In contrast, people who were born before the existence of such technology have been termed "digital immigrants." The implication is that digital natives, who grow up with the technology, better understand the value of such technology and thus may have different (or more

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[1] In microeconomics, inferior goods are defined as goods for which an increase in income decreases consumption, everything else held constant (Boyes & Melvin, 2008; Katz & Rosen, 1991). Classical examples of inferior goods include inexpensive items such as macaroni and cheese, Ramen Noodles, or bus travel.

advanced) media habits and format preference. For example, some media scholars suggested that that news media follow the lead of tomorrow's news audience because "the digital natives are leading the way—and are way ahead of news organizations" (Yaros, 2008).

College Students as "Digital Natives"

According to a recent Pew report, young adults are indeed more likely to own high-tech gadgets than other age groups, and college students distinguish themselves further from their non-student peers in terms of laptop ownership and Internet usage on cell phones. Among four-year undergraduate students, 98% use the Internet and 92% use the Internet through wireless devices. In contrast, only 75% of U.S. adults are online and only 57% access the Internet wirelessly (Smith, Rainie, & Zickuhr, 2011). Therefore, while the "digital natives" concept is not completely accurate—not every young person has access to the latest digital technology—there is no doubt that college students constitute one of the most tech-savvy groups in society. By examining their attitudes toward different newspaper formats through the lens of college newspaper advisers, this study seeks to provide a reality-based assessment on the future of newspapers.

College Newspapers

As for how to accurately measure young adults' format preference for traditional and online newspapers, previous research has identified certain factors as "inhibitors" of newspaper consumption. For example, when people perceive the topics covered by newspapers as unappealing, newspaper readership is negatively affected (Readership Institute, 2003). Therefore, to rule out the plausible effect of irrelevant content on young people's newspaper

reading behavior, this study focuses on college newspapers, which serve as a primary information source for college students and cover events most relevant to campus life.

While college newspapers are not seeking profitability as commercial newspapers do, they are subject to the same (if not stronger) changes in reader attitude and format preference. Additionally, most college newspapers are published in both print and online formats and both formats are offered for free, allowing for a side-by-side comparison of college students' format preference in the most realistic setting. While all episodic evidence suggests that the print edition still is the primary product and major revenue driver for college newspapers (Krueger, 2010), a systematic examination is lacking.

Therefore, this study seeks to examine whether college students indeed embrace digital media over traditional newspaper formats. The goal is to offer a better understanding of young people's news habit and format reference so that commercial newspapers may better serve digital natives.

Research Questions

As of today, commercial newspapers are facing a number of challenges: 1) Declines in print circulation: Newspaper circulation has been declining since 1987 (weekday) and 1993 (Sunday) despite a growing U.S. population (Newspaper Association of America, 2012a). Since 2004, the pace of such declines has quickened; 2) Loss of print advertising revenue: Print ad revenue reached an all time high of 49 billion in 2000 and dropped to 21 billion in 2011 (Newspaper Association of America, 2012b); 3) The relatively small share of Web advertising

revenue: In 2011, the online edition accounted for only 13.6% of newspapers' total advertising revenue (Newspaper Association of America, 2012b).

It is easy to attribute these challenges to the changing habits of digital natives and the unattractiveness of a physical newspaper (Penenberg, 2004), but an empirical investigation may help identify factors underlying the real problem. Therefore, this study seeks to examine the current status of U.S. college newspapers from the readership, circulation, advertising, and format preference standpoints, addressing the following research questions:

RQ1: What is the size of the readership reached by the print and Web editions respectively?

RQ2: Which format—print or online—do college students prefer?

RQ3: What is the advertising revenue generated by the print and Web editions respectively?

RQ4: What are the changes in print circulation and advertising revenue during the past three years?

RQ5: What is the likelihood that college newspapers become an online-only publication in five years?

Method

A Web-based survey of 198 U.S. college newspapers was conducted during May 6-June 6, 2011.

Sampling

A list of college newspaper advisers was obtained from College Media Advisers (now College Media Association), a national association of college media advisers founded in 1954.

The link of the Web-based survey was emailed to each of the 486 newspaper advisers who were members of the association. The cover letter stated that only those who were responsible for or familiar with the business operations of the college newspaper were eligible to fill out the survey. Three reminders were sent during the one-month period.[2] The completion rate was 41 percent. The final sample includes a total of 198 completed surveys, representing 198 college newspapers in the U.S.

Survey Instrument

The survey examined the current state of U.S. college newspapers, the relative importance of their print and Web editions in terms of audience size and advertising revenue, and college media advisers' view about college students' preference for the print/Web edition and the feasibility of online-only publishing. The survey took an average of 10 minutes to complete. The questionnaire was developed based on consultations with college newspaper advisers familiar with the business operation of their newspaper.

Results

Sample Profile

On average, the 198 college newspapers served a student population of 13,432 (SD =11,508). Specifically, about one third of the respondents (32%) indicated that they were serving a student population of under 5,000, some 17% were serving a population between 5,000 to 9,999, about 22% between 10,000 and 19,999 students, and 29% were serving 20,000 or more students. Each paper had an average of 1.9 full-time and 1.6 part-time non-student staff members

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[2] On May 16, May 22, and May 31, respectively.

as well as 46 student staff members. The average annual income was $206,785, the sources of which include advertising (47%), student fees (31%), academic funds (18%), and other (5%).

Multiplatform publishing is common among these campus newspapers. Of the 198 college newspapers surveyed, 98% published a print edition, 97% published a Web edition, and 21% had a mobile app.

Regarding their print operations, 28% of the papers in the sample published less than once a week, 43% were weeklies, 14% published between 2-4 issues per week, and 15% were dailies. On average, these papers published an average of 14 pages per issue (SD = 6.5). Slightly more than half of the papers (51%) adopted the tabloid format, and 46% in broadsheet format. History-wise, as many as 60% of the papers were founded more than 50 years ago, 28% were 21-50 years old, and only 10% had a history of 20 years or less.

The Web edition, in contrast, is significantly younger. The average history is 7.4 years (SD = 4.8). On average, 23% of the newspapers updated the Web site more than once a day and 26% did so once a day. Overall, 89% updated their sites at least once a week. Most sites featured multimedia content—75% of the Web editions included videos, 64% featured slideshows, and 54% published audio stories.

Readership: Print vs. Web

RQ1 sought to compare the number of students reached by the print and Web editions, respectively. The average print circulation (per issue) was 4,850 copies (SD = 4,202)—the median was 3,000. In terms of online readership, among the 103 respondents who were able to

provide Web audience metrics (many indicated they had no such information), the online edition attained an average of 2,864 unique visitors (SD = 9,322) per day—yet the median was only 400.

To make more valid comparisons, repeated measures ANOVA analysis indicated a significant difference between print circulation (mean = 5,590, SD = 4,429) and unique visitors (mean = 2,848, SD = 9,327) among 103 papers that provided data on both print and online usage (F [1,102] = 9.168, $p < .01$).

When the analysis included only the 19 newspapers that published five issues (in print) and updated its Web site at least 5 times a week, the average print circulation was 11,053 (SD = 3,374) and the number of unique visitors was 6,273 (SD = 12,426).

All results indicated the print edition reached nearly twice as many readers on a given day (assuming conservatively that each print copy was read by only one student).

Format Preference

RQ2 asked which format—print or online—college students prefer. Approximately 93% of college newspaper advisers indicated that college students preferred the print edition. Only 7% said students preferred the Web edition.

A follow-up question probed the reasons. The open-ended responses were content-analyzed and classified into a number of themes. Among the 138 responses regarding why college students prefer the print edition, the most commonly cited reasons were:

1. *Accessibility/portability* (n = 84): The print edition is visible and readily accessible on campus at classroom buildings, residence halls, and libraries. Because the newspaper

is portable, students conveniently pick it up and read it before class begins, in class, or at lunch. While the Web edition is also accessible though wifi connections on campus, some respondents believed the print edition is more convenient, "I don't think [students] need the information so badly that they'll visit it online;" another said, "they use phones and computers for other purposes."

2. *Tangibility* (n = 9): The physical nature of the print edition was perceived as an advantage. One respondent indicated, "[Students] like having something in their hands and can read it more easily in class." Additionally, the print paper, as one of the few things students don't consume online, "allows them to disconnect from electronics."

3. *Web edition is not as strong* (n = 9): Several respondents indicated that their Web edition was relatively new, unknown, or not well managed. One indicated their social media presence was more effective in reaching college students than their Web site, "Students go to our Facebook site, but it's hard to get them to the website. Part of it might be that the web is not as good of an operation as the print."

4. *Habit* (n = 8): Some respondents said the print edition is a tradition that has been around for a long time. Students are in the habit of picking up the paper every morning on the way to class. They still want to read the paper in print.

5. *Exclusive content* (n = 7): The print edition offers exclusive content that is not available online—for example, crosswords, games, coupons, and photo keepsakes. One said, "They like to see print pictures."

Still 7% of the respondents indicated that students preferred the Web edition—here is a summary of the 11 responses:

1. *Accessibility* (n = 4): The Web edition is accessible from everywhere. Online, "that is where they live."

2. *Students don't read print* (n = 4): A handful respondents indicated college students no longer read print newspapers. "It is trending this way." "They don't read print if they can help it."

3. *Multimedia/interactivity/timeliness* (n = 3): The Web edition is technically more advanced, featuring multimedia content such as video or color photos that students like.

Advertising Revenue

RQ3 sought to compare the advertising revenue generated by the print edition with that by the Web edition. Results showed that the print edition generated almost all (96%) of the advertising income and the Web edition accounted for only 4% of the advertising revenue.

Trends and Projections

RQ4 sought to identify the changes in print circulation and advertising revenue during the past three years. Print circulations have remained stable for 58% of the newspapers surveyed, 26% have seen circulation declines, and 11% reported circulation increases. In terms of print advertising revenue, 42% of the papers have seen declines, 30% said it has stayed the same, and 25% reported increases.

RQ5 asked about the likelihood that college newspapers become an online-only publication in five years. Nearly two-thirds (63%) of the respondents said it is "very unlikely" or "unlikely" that their college newspapers would become an online-only publications in five years;

23% expressed a neutral view; 14% indicated it is "very likely" or "likely" that their paper would become online-only in five years' time.

A follow-up question probed the reasons why college newspapers are unlikely to become online-only publications in five years. Among the 101 responses, the primary reasons were:

1. *Students prefer print* (n = 34): Because of a strong print readership, many respondents said dropping the print edition within the next five years would be unlikely. Several found the online-only model unrealistic—"I think that would be the death of this paper. Until we become a little more respected source of news… no one would follow us to the web." Another said, "We would gladly trade our costs of printing the paper for moving online… However, once the racks disappear from campus, you are out of sight and out of mind to your audience." One indicated the possibility that the print edition might be reduced (but will not disappear) within the next five years.

2. *Print advertising revenue is important* (n = 23): Because most of the advertising revenue comes from the print edition, "revenue requirements will keep [the print edition] around." "Advertisers love print!"

3. *Print is the tradition* (n = 10): As most of the college papers surveyed have been publishing in print for more than 50 years, it is hard to believe the university would discontinue a tradition so integral to the culture of the institution. As one respondent put it, "It's hard to buck 100 years of tradition."

4. *Print serves educational purposes* (n = 10): Students need print publications for portfolios, and the print edition offers more design opportunities. "The newspaper is essentially a lab. It teaches the students in ways Web alone cannot."

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Among the 14% of the respondents who indicated that their newspapers might go online-only in five years, the single dominant reason was cost reduction.

Cost reduction (n = 13): When decrease in funding from the administration is likely, it is harder to justify printing cost.

Discussion

In sum, these findings suggest that the print edition outperformed the Web edition in terms of readership and preference and generated the vast majority of advertising revenue. Print circulation and advertising revenue in most cases remained stable. As for the future, most college newspaper advisers did not believe an online-only model would become feasible within the next five years. Albeit, such results were collected from college newspaper advisers, they carry managerial implications for commercial newspapers as they envision the future of their industry.

While college newspapers differ from commercial newspapers in many ways, the findings of this study revealed a good deal of similarities. For example, in both cases, the Web edition fails to reach nearly as many readers as the print edition. Previous research has identified the relatively small online readership in relation to the print readership in most (commercial) newspapers' local markets (Chyi & Huang, 2011; Chyi & Lewis, 2009; Scarborough Research, 2012), and this study uncovered similar patterns among college newspapers. Additionally, just as most people prefer print newspapers (Chyi & Chang, 2009; Chyi & Lasorsa, 2002; Chyi & Lee, 2012; Chyi & Yang, 2009; De Waal et al., 2005; Online Publishers Association, 2004), college students seem to share the same format preference. In other words, digital natives are *not* dropping print newspapers in favor of their online counterparts as most think they would or have.

Indeed, one thing that distinguishes these college newspapers from most metro dailies is their fairly stable print circulation (Newspaper Association of America, 2012a). At the time of this study, U.S. daily newspapers have seen declining circulation for 15 consecutive six-month periods (Edmonds et al., 2011), yet 74% of the college papers surveyed in this study reported having either stable or increased print circulations during the past three years—only 26% reported circulation declines. Perhaps because most college papers are supported by school funds, they have the ability to keep their print levels high. To say the least, the results suggest that young adults have no problems reading the print edition of their college newspapers. In other words, the print edition *can* be the most popular format among digital natives when it is readily accessible, free, and relevant.

In contrast, the Web edition, despite being accessible and free and with multimedia capacities, still is *not* the most popular format among digital natives. Such findings support the "online news is an inferior good" postulate (Chyi & Yang, 2009, 2012) and raise questions about the technology-driven approach taken by most commercial newspapers (Picard, 2009). Most importantly, given that college students can respond favorably to their campus newspapers in print, commercial papers may follow suit, by increasing visibility and accessibility, providing relevant content, developing specific pricing schemes, or even launching a free edition for young readers.

Regarding the future, college newspaper advisers perceived the online-only model as unrealistic if not risky. Yet, that is what many in the newspaper industry seem to be pursuing. Such examples range from global payers like *The New York Times*[3] to smaller newspaper firms

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[3] Its publisher Arthur Sulzberger, Jr. said, "We will stop printing *The New York Times* sometime in the future, date TBD" (Fallon, 2011).

such as the Journal Register Company, the CEO of which, when promoting his "Digital First, Print Last" strategy, said, "Stop focusing on print," "Focus on the future and the future is not Print" (Paton, 2010). While no one knows what the future is like, given the current state of the newspaper market (Newspaper Association of America, 2012b), an online-only, all-digital future does not seem practical and may not arrive any time soon.

Limitations and Conclusion

It is acknowledged that this study did not directly measure college students' format preference. The information on format preference was gathered from college newspaper advisers instead. Yet, since these newspaper advisers observe how college students respond to their publications on a day-to-day basis, it is reasonable to assume their views are largely based on reality. Additionally, the readership and advertising revenue comparisons also point to the same conclusion—the print edition is the primary product.

In conclusion, do "digital natives" prefer getting news online to reading the "dead-tree" edition of a newspaper? The answer, according to college newspaper advisers, is no. Moving news from print to online may actually turn young (and old) readers away, as this and other studies have suggested (Chyi & Yang, 2009; Thurman & Myllylahti, 2009). Newspapers should revise their digital strategy for digital natives because the real problem, be it a lack of interest in news (Kaufhold, 2010a) or an inevitable consequence of information surplus (Chyi, 2009), has little to do with the "print format" per se and cannot be solved with technology alone.

Acknowledgements

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