

Influence of Education, Income and Age on Newspaper Use and Platform Preference

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Abstract

Newspapers are finding themselves in a time of great uncertainty due to the fragmentation of news consumers. As a result, understanding base characteristics that can predict newspaper use is key to a publication's survival. Drawing from prior research and existing General Social Survey data, this study examined how education, income, and age are related to newspaper use, and whether education is a predictor of media platform preference. The study found significant correlation between newspaper usage and education, income, and age. This study furthers the understanding of news engagement and provides practical implications for media outlets to better recognize how their potential audiences might interact with them.

I. Introduction

The ways in which people obtain their news has dramatically changed since Schramm and White's seminal work (1949) on age, education and income in newspaper readership. The Internet has provided its users with more news sources than ever before. Online media outlets have delivered a continuous stream of information to consumers, making it more difficult for those consumers to sort through articles of interest (Maes, 1994). As news consumers find themselves in a period of information overload, print circulation has declined. Newspapers are struggling to sustain themselves and meet news consumers' growing demands. News organizations must provide quality content, but also leisure, entertainment and cultural services based on their understanding of readers' needs (Goyanes, 2014), since the development of a lifetime news habit is less of a given. News still matters, but the methods of finding news have changed. "The new digital environment has jolted traditional journalism out of its conservative complacency" (Bird, 2009, p. 295). Today, there is a tremendous need for print news outlets to understand whom their audiences are and how they can best satisfy reader needs. Thus, this study examined the relationship between newspaper use and education, income, and age, as well as the relationship between education and news platform preference.

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II. Literature Review

While there is a limited amount of research comparing education level and newspaper usage, researchers have confirmed the power of education as a predictor of media behavior (Self, 1988). Education is positively associated with general news exposure (Poindexter & McCombs, 2001). Exposure to a variety of media outlets, especially for people from lower socioeconomic backgrounds, has been found to predict the extent to which people are able to receive diverse ideas, with interest and prior knowledge as even better predictors (Wurff, 2011).

Education consists of more than years of schooling. It is a lifelong process that can come from several different sources, including conversations with community members (Ognyanova et al., 2013), suggesting that news, as a common information denominator, can become part of education. Others argue that political interest is a predictor of interest in news, and interest in newspapers (Shehata & Strömbäck, 2011). Less is known about the relationship between general level of education and interest in newspapers. Formal education is a factor in a person's preferred news medium. However, findings have suggested that media use varies widely from person to person, regardless of education.

User demographic profiles of news sites are individually distinct, and the topics that readers view vary by the sites they access (Tewksbury, 2005). Usage of media can reduce information disparities. For example, television news viewership significantly reduced the knowledge gap between education groups during the 1992 presidential election (Kwak, 1999). There are several ways people choose media platforms. "Personal characteristics predict the reception of diversity better than exposure to a variety of news media" (Wurff, 2011, p. 336). Additionally, those who are interested in news must have some knowledge about the issue at hand before they receive diverse ideas from news outlets (Wurff, 2011). Positive content that evokes high-arousal emotions is more viral and can determine which platforms a consumer uses (Berger & Milkman, 2012). Newspaper and Internet use is likely to have a positive influence for readers who are more comfortable and willing to share their opinions (Choi, Cacciatore, Xenos, Scheufele, & Brossard, 2012). Finally, news readership when delivered online varies based on scope. "Readers of online editions of local papers tend to be readers of that paper, but online editions of national papers reach people who don't read the print edition" (Chyi & Lasorsa, 1999, p. 2). Much research about platform preference has focused on audiences' wants and needs and the content itself rather than demographic variables like education.

The author asked the following two research questions:

RQ1: What is the relationship between level of education and use of newspapers?

RQ2: What is the relationship between level of education and choice of platform for news delivery?

Another area of concern is the well-documented slip of newspaper readership among younger readers (Pew, 2016). While people search for credible information from media outlets, younger audiences do not place a high value on reporters' professional training and experience (Armstrong & Collins, 2009). Researchers have historically been somewhat divided on the impact of age on newspaper usage. Some have found age to be significantly related to newspaper readership (Burgoon & Burgoon, 1980), while others claim the influence of age on medium choice is declining (Self, 1988). Nevertheless, it is fair to say people are not reading as many print newspapers as they once were. Between 1999 and 2015, daily newspaper readership has declined by 26% for 18-24-year-olds and 27% for those between the ages of 25-34 (Pew Research Center, 2016). Declining readership is high across all ages, though. Daily newspaper readership decreased by 33% for 35-44-year-olds, 35% for 45-54-year-olds, and 31% for 55-64-year-olds. Those who are 65 years or older have seen the smallest decrease in daily newspaper readership, but that decrease is still 22%.

Because of the dwindling interest in print, many outlets are turning to the Internet as it presents them with a better chance to attract and convince young readers to subscribe (Goyanes, 2014). Even so, readers' lack of trust in newspapers inhibits a news organization's ability to reach a younger audience. "Young adult readers do not ascribe a higher credibility rating to a local newspaper with a professional staff than they do to a student-run newspaper (Armstrong & Collins, 2009, p. 107). While young readers are the least likely to use newspapers, they are still important to news organizations' ability to sustain themselves after older generations die out.

RQ3: What is the relationship between people's age and their newspaper usage?

Limited research has been done about the relationship between income and newspaper use. Some have found that income and newspaper readership are significantly related (Burgoon & Burgoon, 1980), while others have determined socioeconomic status does not correlate significantly with the utility of news (Abrams, Kaul, & Ma, 1979). Although Abrams et al. found no significant correlation between socioeconomic status and perceived usefulness of news, respondents of lower and middle classes demonstrated "statistically significant positive correlations between perceived utility of news" (Abrams et al., 1979, p. 45). In other words, people with low incomes see the value of gathering news.

Online news sources operating under a freemium model can be difficult to compete with. Internet users have grown accustomed to consuming "free" content and are generally unwilling to pay for information. This phenomenon can be observed in declining print circulation revenue (Casero-Ripollés & Izquierdo-Castillo, 2013) and paywall failures (Myllylahti, 2014). The traditional business model of newspapers is deteriorating, as evidenced by slow, constant decreases over time in the Spanish newspaper industry (Casero-Ripollés & Izquierdo-Castillo, 2013). Both in the United States and internationally, several outlets attempted to make up for circulation losses by pushing online content to their audiences. However, efforts to make paywalls a sustainable business model have largely been unsuccessful. "Revenue generated by paid online news content is not substantial enough to make paywalls a viable business model in the short term" (Myllylahti, 2014, p. 179). Still, it is worth noting that media corporations do not disclose information about their digital subscription revenue. This lack of transparency makes it difficult for researchers to evaluate the effectiveness of newspaper paywalls. As with paywalls, issues of affordability might impact a person's ability to access news through newspapers, particularly when discretionary income is already going toward technology. The study asked:

RQ4: Does a person's income predict his or her newspaper usage?

III. Methods

A quantitative analysis was conducted to examine the influence of education, income, and age on newspaper usage and the relationship between education level and preferred platform for news consumption. The analysis included responses from 2,538 U.S. adults polled in the 2014 General Social Survey (GSS). Since 1972, GSS has gathered data on contemporary American society in order to monitor and explain trends and constants in attitudes, behaviors, and attributes. "The GSS is a project of the independent research organization NORC at the University of Chicago, with principal funding from the National Science Foundation" (NORC at the University of Chicago).

This was the most recent publicly available dataset from the GSS with all of the five desired variables. The three independent variables analyzed were education level (*educ*), income (*income*), and age (*age*). The two dependent variables were newspaper usage (*news*) and preferred newsgathering platform (*newsfrom*). To ensure accuracy, the downloaded GSS 2014 dataset was cross-referenced with the online GSS Data Explorer. All measured variables were identical both online and in the 2014 downloaded dataset.

SPSS was used to recode the variables. Education, income, age and newsgathering platform were recoded. The original education variable from GSS had been coded based on years of schooling. To make this more easily understood, this study recoded education levels into the following five categories: less than high school, high school, associate's degree/some college, bachelor's degree, and graduate/professional school. Total household income was recoded into five groups so it could generally reflect groups of people from the lower class, low-middle class, middle-middle class, upper-middle class, and upper class. GSS's income variable was limiting in that it capped responses at \$150,000 or more. Therefore, it is hard to draw conclusions about and distinguish between respondents in the upper-middle and upper class. Age groups were 18-24, 25-34, 35-44, 45-54, 55-64, and 65+. These specific age groups were chosen to align with existing newspaper circulation data from the Pew Research Center. In doing so, it would be safer to draw broader conclusions. The original newsgathering platform variable listed a plethora of options. The recoded variable kept all the existing categories but pushed newspapers, Internet, and television to the top.

To analyze the cleaned dataset, two-way cross-tabs were used. After that, the Pearson correlation coefficient was used to determine the significance of the relationship between newspaper use and education,

income, and age. A Chi Square test was used to explore the relationship between education level and preferred newsgathering platform.

IV. Results

This results section described answers to each of the four research questions on relationships between demographic data and use of newspapers or preferred platforms for news access. With respect to RQ 1, How does a person’s level of education predict his or her newspaper usage, the correlation between newspaper readership and education level is significant at $p < .01$. More highly educated people were more likely to be regular newspaper readers.

For RQ2–Is education a predictor for media platform preference?–differences in platform preference and education was found, with a χ^2 significance of $p < .01$. Data suggest that among college-educated individuals, the internet is the dominant platform of choice for receiving news information, as shown in Table 1. Those who have not graduated high school or did not go to college after graduation relied more on television for their news needs. Radio is used pretty equally across all education levels. Less commonly reported were alternative forms of getting news, which includes all the other ways GSS respondents said they got their information. Respondents were asked where they get most of their information about current news events: newspapers, magazines, the Internet, books or other printed materials, TV, radio, government agencies, family, friends, colleagues, or some other source.

Table 1. Education by Newsgathering Platform*

(Unit: %)

		Level of Education				
		Less than High School	High School	Assoc. Degree/ Some College	Bachelor's Degree	Grad or Prof
Preferred News Platform	Newspapers	10.3	8.3	6.8	16.6	16.8
	Internet	18.0	23.9	43.5	43.5	42.9
	TV	61.3	55.3	39.0	30.9	29.2
	Radio	5.2	6.8	6.1	5.8	5.6
	Books/Magazines	0.5	0.9	1.0	0.9	0.6
	Government Agencies		0.3		0.4	0.6
	Friends/Family/Colleagues	4.1	4.3	3.5	1.8	4.3
	Other/Don't Know	0.5	0.3			
Total		100.0	100.0	100.0	100.0	100.0

*Percentages are of the total pool of respondents, sorted by education and platform

With respect to RQ3—How does a person's age predict his or her newspaper usage?—the moderate correlation between newspaper readership and age was found at a statistically significant level of $p < .01$.

When it comes to RQ4 on the relation of income with newspaper usage, the relationship was significant at $p < .01$. There is an interesting pattern of readership by income, as shown in Table 2. Although for the lowest income levels, about 1/3 of respondents (32.5%) said they never read a newspaper, in the middle range of \$50,000 to less than \$110,000, about equal percentages of respondents (28%) were either daily or never readers. About half of the highest income respondents (51%) were daily newspaper readers.

Of the three independent variables, age has the strongest relationship with newspaper usage. Findings are consistent with prior research highlighting young readers' dwindling demand for print media. In general, regular readers tend to be older. This poses a continued challenge for publishers as older generations die out.

Table 2. Income by Newspaper Readership

		Frequency of Newspaper Readership					
		EVERYDAY	FEW TIMES A WEEK	ONCE A WEEK	LESS THAN ONCE WEEK	NEVER	Total
Total Annual Household Income	\$0- <\$25,000	16.3	17.7	17.7	15.8	32.5	100.0
	\$25,000- <\$50,000	21.1	14.7	13.3	18.6	32.4	100.0
	\$50,000 - < \$110,000	28.0	16.3	14.2	14.0	27.6	100.0
	\$110,000-< \$150,000	26.7	20.8	15.0	16.7	20.8	100.0
	\$150,000+	51.3	11.1	9.4	10.3	17.9	100.0
	Don't Know/Refused	25.2	7.7	15.4	23.8	28.0	100.0
Total		24.9	15.5	14.7	16.2	28.7	100.0

V. Discussion

Despite the hardships that confront the print news industry, there are some positive opportunities for newspaper. People across all educational and financial backgrounds did read newspapers, at least some. While some national publications may market themselves to a wealthier audience, they should also recognize the readership among lower and middle class U.S. residents in both content and advertising. To fail to do so is both a financial and an ethical risk.

Despite this encouragement, there are hurdles that will be challenging for print media to overcome. Of particular concern is the high usage of the Internet for news among young adults and the high usage of television among people with lower levels of education. Findings from this study suggest that newspapers must more effectively engage their non-wealthy audiences and continue exploring alternative, sustainable business models including digital content delivery and partnerships with television news, particularly in local markets.

The impact of education, income, and age on newspaper readership is an underexplored area of study. This study brings into question the notion that newspapers are primarily of interest to upper-middle class and upper class people. Although these groups do have higher readership, many in the lower income

levels still do read newspapers, and they are the great majority of the US population¹. It is dangerous to the future of print media to write off populations still interested in consuming information through newspapers.

This study is limited by the types of data collected. The Pew Research Center and General Social Survey offer valuable insights, but are limited by the fact that there is not a great depth of variables. Data can provide some information on behaviors related to news, but more specific data about users and their choices requires asking users themselves and mixed-methods work including more detailed questioning could generate valuable insights for the news industry.

VI. Conclusion

As more news outlets struggle to sustain themselves, they must work to understand their audience and appeal to readers. Using General Social Survey data, this study found that there was a sizable amount of interest in news consumption across all educational and financial backgrounds. Those with less education tended to prefer getting news from television sources. Those who preferred print tended to be wealthier and more educated. Still, there is demand for news across all demographics analyzed in this study. Future research could use updated data to explore any demographic shifts that have taken place in the last four years.

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