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Effect of the internet on reading fiction books for enjoyment and potential interest in the integration of the two media

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Recommended Citation

The Rochester Institute of Technology

Department of Communication

College of Liberal Arts

Effect of the Internet on Reading Fiction Books for Enjoyment and
Potential Interest in the Integration of the Two Media

by

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A Paper submitted

in partial fulfillment of the Master of Science degree

in Communication & Media Technologies

Degree Awarded:
1 December 2009

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EFFECT OF THE INTERNET ON READING FICTION BOOKS FOR ENJOYMENT AND POTENTIAL INTEREST IN THE INTEGRATION OF THE TWO MEDIA

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Degree: Master of Science in Communication & Media Technologies
Term Degree Awarded: Winter 2009 (20092)

Abstract

As the Internet grows in popularity, interest in the potential harmful effects that it will have on other media increases. The current study assesses the impact that the Internet has had on the leisure reading of fiction books and attempts to determine whether integrating Internet features with fiction books increases the appeal of reading them. An online survey was completed by 162 college students, which measured reading rates, Internet use, preferred Internet and book features, as well as interest in reading books that integrate Internet features. Findings show no indication that the Internet has affected leisure reading rates, that the two media serve entirely different functional needs, and that attempts to incorporate Internet features with fiction books would likely fail.

Keywords: Fiction books, Functional Needs, Displacement, Online Books, Multimedia

Effect of the Internet on Reading Fiction Books and Potential Interest

in the Integration of the Two Media

In this age of increasingly advanced technologies, some suspect that people are gravitating

toward the Internet as a substitute for or a complement to the uses to which people previously put

other media. Nie and Lutz (2000) found that as the number of hours people spend on the Internet

increased, the number of hours they spent watching television decreased. Specifically, users who

spent above ten hours a week on the Internet reported a 65 percent decrease in the amount of

time they spent watching television. Kaye and Johnson (2003) found that between 1996 and

2000, use of the Internet to obtain political information increased, while use of radio

programming and news magazines for that purpose decreased.

The current focus on the Internet follows a path that has been tread many times before, as

similar concerns were previously voiced when new media were introduced. Media substitution

theory (also known as displacement) states that as new forms of media are introduced, users split

their available time between the new form of media and those media previously used (Kaye &

Johnson, 2003). Kaye and Johnson (2003) cite a number of scholars whose research findings

showed that people have a fixed amount of time available to engage in media usage, so in order

to use a new form of media, time previously spent on other forms must be sacrificed. Media that

are functionally equivalent to (meet the same needs as) new forms of media are particularly

susceptible to this because when users perceive a new form of media to be better at fulfilling

these needs, they will sacrifice a larger amount of time spent with previous forms of media in

order to devote more time to the new medium (Robinson & Martin, 2009). Prompted by

concerns that such an event was occurring, scholars have studied radio/newspapers (Lazarsfeld,

1940), television/radio (Schramm, 1961; Newell, 2007; Robinson & Martin, 2009), television/newspapers and magazines (Belson, 1961; Robinson & Martin, 2009) VCRs/television (Henke & Donohue, 1989), Internet/television (Ferguson & Perse, 2000; Kayany & Yelsma, 2000) and so on, yet scholars rarely investigate "old" media such as books.

The current study investigates the effects that the Internet has on people's leisure book reading of fiction literature. Between 1982 and 2002, the results of surveys showed there was a ten percent decrease in the number of adults who read literature for leisure in the United States (Bradshaw & Nichols, 2004). A 2008 study indicated that adult reading rates had risen by 3.5 percent, likely due to nationwide initiatives aimed at counteracting the downward trend, but this number is still 6.7 percent below the 1982 statistics (Gioia, 2009). The Internet might be the cause for this decline because a 1992 survey, conducted before the Internet became a common feature in the home, showed no decline in leisure literature reading. By 2002, however, the Internet was present in more than half of all US homes. A 2001 US Census Bureau report showed that 50.4 percent of homes in the US had Internet access, and a 2003 report showed that the number had increased to 54.7 percent (Day, Janus, & Davis, 2005, p. 1). Thus, due to the Internet's penetration, Bradshaw and Nichols (2004) proposed that Internet usage was negatively related to reading literature.

The purpose of the present study is to investigate people's preference for the Internet instead of fiction literature, and whether the appeal of fiction literature would increase were it presented to them on the Internet and given interactive, multimedia features. On a broader scale, this study asks whether it is possible for a new form of media (here, Internet) to support an older form of media (here, books) in such a way that people's consumption of both media increases,

thereby negating concerns regarding displacement. Additionally, this study investigates the impact that heavy versus light media usage (here, Internet) has on other media (here, fiction books). Specifically, this study investigates the role that multimedia features of the Internet have in causing user preference for the Internet over fiction literature, and whether readership of fiction literature would increase were it to be placed online and given comparable features.

The current study seeks answers to the following questions:

RQ1: What differences are there between heavy versus light leisure Internet users and their self-reported number of fiction books read for enjoyment?

RQ2: To what degree do heavy versus light leisure internet users say the appeal of a website increases when that website employs the use of multimedia features versus websites that use only text?

RQ3: What self-reported differences are there in Internet features of the greatest appeal between heavy and light leisure internet users?

RQ4: What self-reported differences are there in fiction book features of the greatest appeal between heavy and light leisure internet users?

RQ5: To what extent do heavy and light leisure Internet users differ in their self-reported preference in reading a paper version of a fiction book that includes a supplemental website containing multimedia content, or an online version of a fiction book that has in-text links to multimedia content?

A large body of work spanning many decades exists regarding the impact that new forms of media have on older forms of media (Belson, 1961; Henke & Donohue, 1989; Lazarsfeld, 1940; Schramm et al., 1961; Szalai as cited in Robinson & Martin, 2009). In recent years, these

studies have concentrated on the impact that the introduction of the Internet has had on older

forms of media (Ferguson & Perse, 2000; Kayany & Yelsma, 2000; Kaye & Johnson, 2003; Lee

& Leung, 2008; Nie & Lutz, 2000). However, these studies have not specifically addressed the

impact that the Internet has had on book-published fiction literature, nor have they questioned

what methods may be employed to counteract, should they prove to exist, the negative effects

that the introduction of the Internet has caused regarding this type of literature. To accurately

assess whether displacement is occurring, all forms of media must be addressed. Thus far, the

only printed media that have received adequate attention are newspapers and magazines (Kayany

& Yelsma, 2000; Kaye & Johnson, 2003). The current study seeks to add to the body of work

regarding the impact that the Internet has on print media by specifically addressing the potential

impact it has on fiction literature.

A number of scholars and industry analysts have speculated on how the Internet can be

used to help the ailing publishing industry. Weisberg (2009) states that "reading without paper

might make literature more urgent and accessible than it was before the technological revolution,

just as Gutenberg did" (p. 49). He argues that publishing companies are faced with a "high fixed

price of printing and distribution" and that electronic forms of publishing are a "much lighter-

weight model" (p. 49). Stephen Page, publisher and CEO of Faber & Faber, believes that the

troubles that most publishing companies are facing are due to the fact that the mass market has

become so focused on books about celebrities and books by bestselling authors that other books

fall by the wayside. It is his belief that these other books can find a new life on the Internet.

These online books, he states, should be feature-rich, including search capabilities and author

interviews (Page, 2008). Page's beliefs are echoed by advertising and marketing firm JWT,

which in 2009 conducted in-depth interviews with experts in a variety of fields, as well as

thousands of consumers, in regard to the publishing industry and the Internet. After analyzing

the data collected, the company determined that publishing companies must start combining

media in order to attract customers (Pierleoni, 2009). Thus, the current study, in addition to

evaluating the potential impact that the Internet has had on fiction literature, also assesses how

the Internet might be used to increase interest in reading by placing books online.

This issue is of great social importance. As noted previously, reading rates have declined

since the pre-Internet days (Bradshaw & Nichols, 2004). Publishing companies are losing

money due to declining book sales, leading to massive layoffs and manuscript acquisition freezes

(Elberse, 2009; Rich, 2009). These statistics are concerning because low reading levels have

been tied to poor academic achievement, an increased likelihood of dropping out of high school,

low employment levels, and low levels of civic engagement (Iyengar et al., 2007). In 2005,

nearly two thirds of children in the United States between grades seven through twelve received

below average reading scores on national standardized tests (Iyengar et al., 2007). While recent

initiatives to increase reading levels have met with some success (Gioia, 2008), determining the

root of the problem may assist organizations such as the National Endowment of the Arts to

develop plans to counteract the negative effects. This study provides evidence about the

assumption that many have made that the Internet is to blame for this downward trend (Birkerts,

2004; Bradshaw & Nichols, 2004; Heinninger, 2004; Rich, 2009), allowing the organizations to

make tactical decisions in their methods for attacking this issue.

Literature Review

For decades, communication researchers have studied the impact that new media have on previous forms of media. Often the impetus for such research is the fear that these new media will have a severe negative impact on the older forms of media, and a number of theories have been advanced to support or to refute this fear (Belson, 1961; DeFleur, 1970; Ferguson & Perse, 2000; Henke & Donohue, 1989; Lazarsfeld, 1940; Kayany & Yelsma, 2000; Kaye & Johnson, 2003; Lee & Leung, 2008; McCombs, 1972; Nie & Lutz, 2000; Schramm et al., 1961; Szalai as cited in Robinson & Martin, 2009). Displacement theory states that people have a fixed amount of time they devote to media consumption, so when a new medium is introduced, people redistribute their available time to include that new form of media, to the detriment of previous forms (Kayany & Yelsma, 2000; Kaye & Johnson, 2003; Lee & Leung, 2008). It is thought that these people will progressively allot more and more of their available time to new media forms, eventually putting the older forms of media at risk (Newell, 2007). This theory has also been described in monetary terms, where the Constancy Hypothesis states that people spend a fixed portion of their income on media (McCombs, 1972).

Functional displacement is similar, but takes a more generous approach toward older media. It states that new media do not displace older media entirely, but rather people transfer use for a particular purpose (function) to a new medium because they see it as a better source for fulfilling that need (Newell, 2007). This theory recognizes the fact that media usage patterns depend upon individuals' needs, and that the medium used for a particular need can change quickly when a new medium is introduced (Henke & Donohue, 1989).

Related to functional displacement, but not always as generous, is the idea of functional alternatives (DeFleur, 1970). DeFleur states that when a medium arrives that better serves a social or psychological need than existing media, then the new medium's popularity will increase while the old medium's popularity decreases. He made this statement based upon an analysis of media diffusion in the US, which showed that media adoption follows an S-shaped curve, reaching an apex and then declining. However, in each instance of decline, another medium that had the ability to serve as a functional alternative to the declining medium was increasing in popularity. This pattern held true for newspapers, movies, radio, and television (DeFleur, 1970).

Another method by which one can view displacement is by the user-centric approach. The user-centric approach ties in with uses and gratifications theory and states that people choose media that best fit their needs. Under this approach, if people perceive an existing medium as meeting their needs, they will have no desire to replace it. They will instead use a new medium to supplement the existing medium without decreasing the amount of time spent using that medium (Lee & Leung, 2008).

One theory that opposes these theories of displacement is media saturation. This theory states that the introduction of a new medium does not have a negative impact on existing forms of media. Instead, people begin to devote more time to media consumption. This allows them to use the new medium, yet continue to use existing media as they did previously (Newell, 2007).

Numerous studies have been conducted that claim to support one of these theories and refute the others. However, there has been no general consensus, as results continually contradict one another. The reason for such contradictions is unknown. It might be a difference in methodology, or perhaps a difference in respondent base. In 1959 Schramm (Schramm et al.,

1961) conducted a study in which he compared two towns in Canada: Teletown and Radiotown. Radiotown was unique in that, due to its geography, its residents did not have access to television. Using closed-ended questionnaires, Schramm surveyed first, sixth, and tenth graders in both towns regarding their media usage and determined that the children in Teletown had replaced time spent with radio, movies, and print with time spent watching television. These findings appear to prove the existence of displacement.

However, Newell (2007) visited Radiotown in 2000, curious to find out what changes had occurred in the 40 years since Schramm's study. He surveyed people who were likely to have been participants in Schramm's study, now in their 40s and 50s, on their media usage. While the questionnaires used by Schramm in the original study were no longer available, assumptions were made regarding questions asked based on data provided in Schramm's report. Data for Newell's study were collected via three methods: an inventory of media owned was conducted in each household, interviews were conducted with each respondent, and respondents provided self-reported media usage data via a diary they filled out regarding their media usage during the previous day.   Results showed that participants had communication devices – televisions, radios, telephones, computers, VCRs, gaming devices – in almost every room of the house and that at least one device was in use almost constantly during waking, non-working hours. Participants averaged six to 15 hours of media usage a day. This figure was double the amount of time reported 40 years previously. Additionally, radio was used for longer periods each day than the amount of time reported in Schramm's investigation. These results, Newell stated, demonstrated that the presence of television (plus the many inventions between 1959 and

2000, such as gaming devices and the Internet) did not displace other media. Rather, media saturation was in effect.

Prompted by the popular fear that television was to blame for declining newspaper circulation rates in Britain, Belson (1961) conducted a study measuring media usage by 1157 adults in the London area; 288 were television viewers and 869 were non-viewers, and the two groups were matched based on a number of demographic aspects in order to rule out any differences that might arise based on personal circumstances. He gathered self-reported usage data from participants on the reading of 53 specific newspapers and magazines. Findings showed that those publications defined as "quality press" (serious and respected publications) did seem to suffer a decline related to television viewing, whereas "popular press" publications were not affected. Further investigation into this anomaly suggested that because participants generally did both their television viewing and their reading in the family room, they had to adjust their reading habits due to the distractions caused by the television when others were in the room viewing it while the participant was reading. Therefore, popular press publications were preferred for their short, easy to read articles, rather than the articles found in quality press publications, which demanded time and serious attention. However, Belson also found that the television sometimes led to an increase in purchases of both publications. Television viewers reported that they bought publications that dealt with topics of personal interest that they had seen on television. Of import, though, is the fact that Belson also found that there were many outside factors that could likely be attributed to the decline in circulation among both the viewing and non-viewing public. Therefore, displacement appears to have taken effect to a small degree, but data overall showed that it did not occur.

In 1965, Alexander Szalai conducted the Multinational Time-Budget Research project to find out how people in 12 countries distributed their time on a day-to-day basis. Utilizing time diaries and adjusting to accommodate for demographic differences, he made a number of discoveries. He found that participants spent an average of ten hours a week watching television, and that television ownership rates ranged from a low of 28 percent in Bulgaria to a high of 95 percent in the US. Media he determined to be functionally equivalent to television suffered due to television's presence. He noted a 70 percent decrease in radio consumption, a 53 percent decrease in movie attendance, and a 30 percent decrease in book and magazine reading (Szalai as cited in Robinson & Martin, 2009). Thus, these findings support the theory of displacement.

McCombs (1972) conducted a study on media from a financial standpoint, analyzing communication spending in the US from 1929 to 1968 and determined that, adjusting for inflation and other outside factors, spending on media remained relatively constant. This supported Scripps' Constancy Hypothesis, which states that people spend a fixed portion of their funds on media, so changes in amounts spent have nothing to do with emerging technologies, but rather with the economic climate. McCombs' findings showed no indication that new media led to an increase in consumer spending, but rather that "household budgets seem[ed] to maintain a fixed portion of the available income for mass communication" (p. 18). For example, beginning in 1947, consumer spending on movies declined for over a decade, which is directly correlated to the saturation of the television in American homes. McCombs stated that this occurred because the two media shared such a similar purpose. Radio and print media, however, were not significantly affected because the purposes they served were different enough from that of television. In fact, where print media (defined as newspapers, magazines, books, sheet music,

and maps) is concerned, McCombs found that spending remained relatively constant throughout the 40 years analyzed. In addressing new and emerging media (at the time of the writing of this article) such as tape cassettes, video cassettes, cable television, and computers, McCombs stated that most of these media would require a larger financial investment than previous media, and that because people have a set monthly budget for media, he was unsure as to how this would play out, but that "the constraints described by the Principle of Relative Constancy implies that significant shifts will occur in the older media" (p. 53).

As new forms of media arise, scholars stand ready to assess their impact. Henke and Donohue (1989) studied the effect of VCR ownership on television viewing. While not a medium in itself, the VCR had a profound effect on its partner, the television. This study gathered data regarding tape viewing habits, tape recording habits, and television viewing habits via a telephone survey administered to a random sample of 500 VCR owners. Participants indicated that after acquiring a VCR, they spent less time watching television, either because they spent their time renting movies or because they programmed their VCRs to record the television programs they were interested in viewing. Displacement, they claimed, was in effect.

Here we stand 20 years later, though, and VCRs are becoming a thing of the past while newer technology, such as DVRs and DVD players, are going strong, as is television itself. The new threat now is the Internet. In 1996, when the Internet was still in its public use infancy, Lin (2001) conducted a study meant to assess the potential threat that this new medium held toward other traditional media, and to determine the likelihood that people would adopt it. Data for the study were gathered via a telephone survey administered to a random sample of 421 participants who did not have Internet service. She found that the Internet appealed to a diverse demographic

population and that barriers to acquisition were virtually non-existent due to the fact that

participants reported that neither price nor technical savvy would deter them from adopting this

new medium. Did this mass appeal mean that existing media was in trouble? Not necessarily.

According to Lin, in order for displacement to occur, users must consider the Internet to be more

cost-effective than other forms of media and to contain superior content and technical benefits as

well. At the time of her study, it was too early to tell whether the Internet would be perceived as

such.

The following year, in 1997, Ferguson and Perse (2000) conducted a study to assess the

impact that the Internet was having on television viewing rates. They conducted an online

survey using a sample of 250 college students from a Midwestern university and an East Coast

university, aged 17 to 46. 59.7 percent of participants had access to a computer at home, and of

those, 70.4 percent had Internet access. However, all participants had access to the Internet on

campus, and thus the Internet was used an average of 5.46 times a day by the sample. The study

found that participants rated "entertainment" as a primary reason for using both the Internet and

television, and that this might indicate slight displacement of television by the Internet at the

time of the study. However, participants also indicated that another primary reason for television

viewing was for relaxation purposes. Ferguson and Perse put forth that where this reason for use

was concerned, there was no threat of displacement because the Internet was too interactive to be

considered relaxing, whereas viewing television was merely a passive activity. Therefore,

because television and the Internet were not functionally equivalent in that respect, the Internet

had no chance of displacing viewers for whom relaxation was the primary reason for television

viewing. However, they also stated that they believed there was a strong chance that changes in

the Internet would have a marked impact on both television and other media in the years ahead. Therefore, as of 1997, Ferguson and Perse believed that *categorical* displacement was in effect, or rather that displacement occurred in some instances where viewers whose reasons for watching television were functionally equivalent to reasons for using the Internet.

In the years since Lin's and Ferguson and Perse's studies were conducted, many contradictory studies have been published regarding which medium, if any, is being displaced by the Internet. Lee and Leung's (2008) study determined that the Internet combines many forms of media into one package and is a potential displacement threat to all media. In this study, a random sample of 388 Internet users between the ages of 15 and 64 in Hong Kong were administered a structured questionnaire via a face-to-face interview. Their findings showed that the Internet had displaced newspapers and television as the primary news source, and that it had displaced television as the primary entertainment source. In particular, respondents reported a 53% reduction in television consumption and a 35% reduction in newspaper reading. Respondents also reported a 40% reduction in radio consumption, and reductions in the use of telephones, DVDs and CDs as well. Of particular interest to the present study, it was found that respondents reported a reduction in book reading due to Internet usage as well.

People once had many hours available for reading, but advances in technology, which resulted in new media, led to competition for that time . The Internet is the latest competition. Displacement is not the only concern, however. Many worry that Internet use is damaging people's ability to process information written on paper because the way people read online, clicking links and moving back and forth between pages, is very different from the way people read printed text, which is a linear method (Birkerts, 2004). In particular, there is concern that

the increasing popularity of the use of online news as a primary news source is "setting the usage and behavior patterns for future generations" (Ronte, 2001, p. 19). This is a possibility that publishers must seriously think about, for although we still live in a book and paper world, "new generations, often more literate with computers than with paper, will become more prevalent" (Ronte, 2001, p. 19).

Displacement theory and related theories such as functional displacement, the user-centric approach and media saturation have been hotly debated for decades. "Radiotown" provided an example of displacement in one study (Schramm et al., 1961), but gave no evidence of displacement in a similar study conducted forty years later (Newell, 2007). Belson (1961) found that television might have a slight displacement effect on newspapers and magazines. Szalai (as cited in Robinson & Martin, 2009) found strong evidence that television had a displacement effect on radio, movies, books, and magazines. McCombs (1972), on the other hand, found financial evidence of displacement occurring of movies by television, but no evidence in any other media. VCRs were found to cause a decrease in time spent watching television in a 1989 study (Henke & Donohue, 1989). The Internet was found to be a possible but not proven displacement threat to traditional media by Lin (2001), a partial displacement threat by Ferguson and Perse (2000), and was found to be a definite threat to all traditional media by Lee and Leung (2008), leading to a decrease in consumption of multiple types of media, most notably television and newspapers. It is important that we come to a consensus regarding the impact that the Internet has had on other media, for it is possible that as our Internet usage increases, it becomes increasingly difficult for us to process the linear format of printed text (Birkerts, 2004; Ronte, 2001).

Method

Sample

Data were collected via an email survey distributed to a convenience sample of students at the Rochester Institute of Technology. In order to correct for potential response bias by major, participation requests were emailed to all undergraduate, graduate, and doctoral students in both the liberal arts and engineering colleges. The response rate was 6.00%, with a total of 162 participants; 122 of these were engineering students, while 40 were liberal arts students. 102 were male, 60 female, 112 undergraduates, 49 graduates, and 1 doctoral. Participants ranged in age from 18 to 61, with an average age of 22.53.

Measures

All research questions compared differences between heavy and light leisure Internet users. In order to classify respondents into these categories, they were asked how many hours they spent on the Internet for enjoyment *yesterday* and how many hours they spent on the Internet for enjoyment *the day before yesterday* (survey questions 2 and 3). Mean responses for each question were computed, and the means were then summed. Respondents whose summed response was equal to or less than the summed mean of the two responses were classified as light leisure Internet users and those whose summed responses were greater than the summed mean were classified as heavy leisure Internet users.

To determine the amount of fiction literature reading (RQ1), respondents were asked to report the number of fiction books they read for enjoyment in the past month (survey question 1). A t-test compared the mean responses for each Internet user type.

To determine the degree to which multimedia features increase the appeal of a website (RQ2), participants were asked to rate the statement, "Websites that use multimedia features are more appealing than websites that only use text" (survey question 28), on an interval level scale of one to seven. A t-test compared mean responses for each Internet user type.

To determine Internet feature preference (RQ3), respondents were asked to rate their frequency of use of 15 Internet features (survey questions 5-19) on an ordinal level scale of one to seven. Mann-Whitney tests compared median responses for each Internet user type. Means were then examined to determine the ranking order of frequency of use of each Internet feature type by each user type.

To determine fiction literature feature preference (RQ4), respondents were asked to rate seven statements (survey questions 20-26) on an interval level scale of one to seven. T-tests compared mean responses for each Internet user type. Means were then examined to determine the most popular features for each user type

To determine preference for a paper version of a fiction book that includes a supplemental website containing multimedia content, or an online version of a fiction book that includes in-text links to multimedia content (RQ5), respondents were asked to rate ten statements (survey questions 32-41) on an interval level scale of one to seven. T-tests compared mean responses for each Internet user type.

Five additional items on the survey instrument unrelated to research questions were posed to respondents. Differences between heavy and light Internet users for these questions were analyzed as well. Respondents were asked to select one of three statements regarding whether they read more fiction books a month for enjoyment before they began using the Internet (survey

question 4). A chi-square test compared responses. A similar survey question asked respondents to rate a statement regarding whether they read more fiction books a month before they began using the Internet on an interval level scale of one to seven. A t-test compared mean responses for each Internet user type.   Respondents were asked to rate a statement indicating that they would read more fiction books if they did not have access to the Internet (survey question 31) on an interval level scale of one to seven. A t-test compared mean responses for each Internet user type. Respondents were also asked to rate a statement indicating that they liked reading fiction books for enjoyment (survey question 27) on an interval level scale of one to seven. A t-test compared mean responses for each Internet user type, and was also used to analyze response percentages for respondents as a whole. Finally, respondents were asked to rate a statement regarding their preference for the Internet over fiction books (survey question 29) on an interval level scale of one to seven. A t-test compared mean responses for each Internet user type.

Demographic data was collected at the end of the survey. Respondents were asked to enter their age in an open-ended field (survey question 42), select their gender (survey question 43), select their student category (survey question 44) and enter their major in an open-ended field (survey question 45). The survey question regarding student category had an option "none of the above", meaning that the respondent was not a student. Because this survey focused on college students, data pertaining to any respondent who selected this option was discarded.

<div align="center">Results and Discussion</div>

Each research question in the study focuses on the differences between heavy and light leisure Internet users. In order to classify respondents into these categories, they were asked how many hours they spent on the Internet for enjoyment *yesterday* and how many hours they spent

on the Internet for enjoyment *the day before yesterday* (survey questions 2 and 3). The mean for

each question individually was determined to be two hours. Based upon these results,

respondents who reported spending a total of four hours or less on the Internet for enjoyment

between the two days were classified as light Internet users and those who reported spending

more than four hours were classified as heavy Internet users. Based upon these parameters, 82

respondents were classified as light Internet users and 80 were classified as heavy Internet users.

Five questions on the survey were not directed at any of the five research questions posed

in this study. However, they are related to the impetus behind the study, and they set a context

for the research question results.

Participants were asked whether they read more fiction books a month before they began

using the Internet (survey question 4). Responses were nearly evenly divided, with 68

respondents (41.98% of all participants) stating that they read more before they began using the

Internet, and 61 respondents (37.65% of all participants) stating that they did not. The remaining

32 respondents stated that they have used the Internet all their lives, so they were unable to

judge. Results of a chi-square test indicated that there was no significant difference between

heavy and light Internet users.

As a check against this set of responses, respondents were later asked to indicate their

level of agreement with the statement "Before I began using the Internet, I read more fiction

books a month than I do now" (survey question 31). Respondents tended to indicate lower-mid-

level to mid-level agreement, with the mean for light Internet users at 3.58 and the mean for

heavy Internet users at 4.70. Results of a t-test indicated that the difference between group

responses was non-significant. Based upon the fact that there was no significant difference

between Internet user groups for neither survey question 4 nor survey question 31, it can be

assumed that reading habit history had no effect on research question data.

Because part of the focus of this study was to analyze the potential impact that the

Internet has had on leisure reading levels, respondents were asked to rate their level of agreement

with the statement "If I did not have access to the Internet, I would spend more time reading

fiction books" (survey question 30). Respondents tended to indicate mid-level agreement with

the statement, with the mean for light Internet users at 4.27 and the mean for heavy Internet users

slightly higher at 5.24. Results of a t-test were statistically significant [$t = -3.293$ $df = 159$ $p =$

.001], indicating that heavy Internet users were in more agreement with the statement than light

Internet users. While the questions about reading rates before respondents began to use the

Internet versus after showed no statistical difference between heavy and light Internet users,

responses to question 30 suggest that Internet usage might have somewhat of an impact on

reading rates among heavy Internet users. However, it was difficult to judge the accuracy of

these data because the question was hypothetical. Confidence in accuracy could only be attained

if respondents were actually deprived of Internet access and reading rates during that time were

compared to reading rates when they had Internet access.

It was fundamentally important to ask respondents whether they like to read, as this

factor would likely have an impact on responses to many of the questions in the survey.

Therefore, respondents were asked to rate their level of agreement with the statement "I like

reading fiction books for enjoyment" (survey question 27). A t-test indicated no significant

difference between heavy and light Internet users, so percentages were analyzed based upon all

respondents. Responses were more heavily weighted toward the end of the scale, "strongly

agree", with 17.9% selecting six and 48.8% selecting seven. Table 1 illustrates percentage

distribution:

Response Level	Percentage
1 (strongly disagree)	6.8%
2	5.6%
3	4.3%
4	7.4%
5	8.6%
6	17.9%
7 (strongly agree)	48.8%

Table 1: *Level of Interest in Reading Percentage Distribution*

This information illustrates the fact that respondents tended to indicate that they enjoy reading.

Fewer than a quarter of respondents (39 of 162) indicated that they have little to moderate

interest in reading (based upon response levels 1-4). Therefore, it can be assumed that low

reading rates or negative reception to reading-related survey questions are not based on

disinterest in reading overall. Further, because there was no significant difference between the

two respondent groups, it can be assumed that level of interest in reading had no impact on

research question data.

It was likewise important to ask respondents whether they prefer the Internet over reading

books. Therefore, respondents were asked to rate their level of agreement with the statement "I

am more interested in surfing the Internet than I am in reading a fiction book" (survey question

29). Results indicated that respondents neither agreed nor disagreed with the statement, with a

mean of 4.00 for light Internet users and a mean of 4.30 for heavy Internet users. Results of a t-

test regarding differences between heavy and light Internet users showed no statistical

significance, so it can be assumed that Internet user group preference for the Internet over books

or vice versa had no impact on survey question data.

To summarize the survey questions that serve as a context for research question related

data, differences between Internet user groups are negligible and had no effect on research

question-related data. No significant differences were found regarding reading habit history,

interest in reading, or preference for either the Internet or books. While the difference between

Internet user groups was significant when asked whether they would read more if they did not

have access to the Internet, with heavy Internet users indicating a slightly higher level agreement

with the statement, it is not likely that this factor had any direct impact on research question data.

Overall, both Internet user groups indicated that they enjoy reading, indicating that negative

responses to survey questions cannot be assumed to be related to lack of interest in reading.

When analyzed as a whole, it is apparent that findings related to research questions were not

affected by basic differences between Internet user groups analyzed in this survey, nor by the

appeal of reading books in general.

Research Question One asked "What differences are there between heavy versus light

leisure Internet users and their self-reported number of fiction books read for enjoyment?"

Question one on the survey asked respondents to report how many fiction books they had read

for enjoyment in the past four weeks. The mean response was 1.31 for light Internet users and

1.36 for heavy Internet users. Results of a t-test show that the difference between the two groups

was non-significant, so it appears that respondent groups have similar reading habits at present.

However, because the survey only gathered data on the number of books respondents read in the

past four weeks, it is difficult to say whether these numbers are the norm for respondents. In order to establish confident data, it would be better to expand beyond this timeframe.

Research Question Two asked "To what degree do heavy versus light leisure internet users say the appeal of a website increases when that website employs the use of multimedia features versus websites that use only text?" To gauge respondent interest in multimedia features versus plain text, respondents were asked to indicate their level of agreement with the statement, "Websites that use multimedia features are more appealing than websites that only use text" (survey question 28). The mean response was 5.09 for light Internet users and 4.66 for heavy Internet users, showing slightly higher than mid-level agreement. Results of a t-test show that the difference between Internet user groups was non-significant. Therefore, it appears that respondents as a whole do not differ in their preference for multimedia features.

Research Question Three asked "What self-reported differences are there in Internet features of the greatest appeal between heavy and light leisure internet users?"   To determine which features of the Internet were preferred by respondents, they were asked to rate 15 features by frequency of use on the following ordinal-level scale of one to seven:

Ordinal Number	Description
1	Very seldom or never
2	Once every few months
3	Once a month
4	A few times a month
5	Once every few days
6	Once a day
7	Multiple times a day

Table 2: *Ordinal Level Scale Labels*

See Appendix B, questions 5-19, for a detailed list of features analyzed. Results of Mann-Whitney tests found significant differences between Internet user groups on nine of these features. Table 3 illustrates these results, using means to illustrate placement on the scale:

Internet Feature	Mean Light/Heavy	Mann-Whitney Significance
Looking up information on various subjects	6.05 6.45	.033
Reading fictional stories (of any length)	1.63 2.99	.000
Watching television shows	3.50 4.08	.050
Watching movies	2.57 3.25	.014
Watching video clips	4.21 5.22	.000
Playing role playing games	1.37 2.33	.000
Instant messaging	4.54 5.69	.002
Blogging	1.51 2.01	.012
Message boards	2.32 3.01	.041

Table 3: *Statistically Significant Internet Features*

In each instance, heavy Internet users reported more frequent use of these features, which is to be expected since they spend the most time on the Internet, although it is not clear why these particular categories were the only categories to show statistical significance. Of these statistically significant categories, looking up information was by far the most popular feature for each respondent set, followed by instant messaging, watching video clips, and watching

television shows. The other features were markedly unpopular. Implications are discussed below.

Although it is not directly related to this research question, it is also important to analyze the most frequently used Internet features overall, since this research study in part seeks to understand what makes the Internet appealing and how those appealing features might be used to generate interest in book reading. This information can also be used to further supplement the data gathered for Research Question 5. The features that at least one respondent set indicated they use a few times a week or more were: news, looking up information, watching video clips, email, instant messaging, and social networks. Features used most infrequently, receiving a rating of once a month or less within both Internet user groups, were: reading fictional stories, making purchases, watching movies, playing both role playing and non-role playing games, blogging, and message boards. The two remaining features, watching television shows and listening to music, received mid-level results of "a few times a month" within at least one respondent set. Observed as a whole, data show that interpersonal communication activities (email, instant messaging, social networks) are most frequently of the greatest appeal to respondents; both email and social networks received high ratings by both Internet user groups, and instant messaging received a mid-range ranking. Following that, the second most important type of Internet features were text-based informational features, news and looking up information; both features received high ratings from both Internet user groups. However, it is important to point out the fact that "news" is not necessarily limited to text-only; it can refer to video as well. These two types were not separated, so it is impossible to tell exactly what respondents had in mind when answering this question. Watching video clips falls into the

frequent use category as well, although only for heavy Internet users. Here again, it is difficult to tell what respondents had in mind when answering this question; it might be that they took news clips into account, or that they excluded them because they placed them into the "news" category. Therefore, it is somewhat difficult to gauge the appeal of text versus visual media features. Both television and movies received low-end ratings (although heavy Internet users indicated mid-range usage for the television category) but this separation from the video clip category might be an issue of length and/or time rather than actual interest in the feature. This is speculation, and warrants further questioning to obtain concrete data. Another multimedia feature, music, received mid-range ratings within both Internet user groups, which bolsters the theory that multimedia features are overall appealing to Internet users as a whole, although, as stated previously, speculation about low-rated visual media features makes it impossible to make a confident statement about interest in visual media online.

Referring back to text-based media, as stated previously, both news and looking up information received high ratings. However, reading fictional stories received a low rating. Blogging did as well, although this feature does not necessarily fall into the text-based category because it is a participatory form of media. In fact, an argument can be made that it might belong in the interpersonal communication category, although because there is not necessarily any direct back-and-forth communication involved with blogging, it is best not to place it in this category. Rather, it should be placed in a category of its own.

Buying products is also in a category of its own and received a low rating as well, which is possibly due to the fact that this is a monetary-based feature. The final category that can be developed within the evaluation set is "gaming", with both RPGs (role playing games) and non-

RPGs falling into this category. Both features received low-end ratings from both Internet user groups. An argument can be made that these might be relevant to the interpersonal communication category since both can involve communication with other players, especially RPGs, but as the dominant role within this category is simply playing games, it is best not to make any assumptions in regard to the category's effect on the appeal of interpersonal communication. This category can also be connected to blogging, as both are participatory forms of media. Although both are on the low end of the scale, and thus no conflict within data sets arises, it is again best not to assume similarities because they are very different forms of participatory media.

Research Question Four is RQ3's book-related counterpart asking, "What self-reported differences are there in fiction book features of the greatest appeal between heavy and light leisure internet users?"   To gauge which features were of the greatest appeal, respondents were asked to rate their agreement with statements regarding why they read fiction books for leisure (survey questions 20-26). For a complete list of statements, please see Appendix B. Results of the t-tests found that differences between internet user groups on three of the seven items (survey questions 23, 24, and 26) were significant, as Table 4 illustrates:

Statement	Mean Light/Heavy	Significance
I read fiction books for enjoyment as a form of escapism.	4.33	.028
	5.10	
I read fiction books for enjoyment as a form of entertainment.	5.59	.006
	6.09	
I read fiction books for enjoyment because reading books places vivid pictures in my mind as I read.	4.86	.013
	5.16	

Table 4: *Statistically Significant Fiction Book Features*

In each instance heavy Internet users agreed more strongly with the statements. Because results

from RQ 1 indicate that there is no significant difference between the amount of fiction book

reading for enjoyment between the two Internet user groups, coupled with results from the

independent survey question that indicated that both Internet user groups enjoy reading, it cannot

be assumed that these differences are due to level of interest in reading. Rather, the differences

possibly indicate that heavy Internet users value media that provide entertainment, creativity, and

detachment from self more highly than do light Internet users. This suggestion is based upon the

fact that while light Internet users tended to express mid-level agreement with the statements,

heavy Internet users tended to express agreement on the upper end of the scale. Statistically

significant results from RQ3, which show that heavy Internet users were more interested in

visual media that can overall be placed in the entertainment category, bolster this theory.

It is important, also, to analyze the level of interest that respondents expressed in regard

to all seven statements. Table 5 illustrates book feature popularity in descending order:

Question Number	Statement	Mean Light/Heavy
24	I read fiction books for enjoyment as a form of entertainment.	5.59
		6.09
26	I read fiction books for enjoyment because reading books places vivid pictures in my mind as I read.	4.86
		5.16
23	I read fiction books for enjoyment as a form of escapism.	4.33
		5.10
25	I read fiction books for enjoyment because reading books makes me feel like I'm in the story.	4.18
		5.04
22	I read fiction books for enjoyment to live vicariously through the characters' lives.	4.14
		4.58
20	I read fiction books for enjoyment to learn about other eras.	3.48
		3.92
21	I read fiction books for enjoyment as to learn about other societies.	3.41
		3.95

Table 5: *Fiction Book Feature Means*

Questions 20 and 21, for which there was no statistical difference between heavy and light

Internet users, were the only two statements that scored on the lower end of the scale. These

were the only questions that involved informational aspects of fiction books, which indicates that

respondents do not read fiction literature for enjoyment as a learning tool. In contrast,

informational features were among the highest ranking Internet features used by respondents.

These results should next be compared to fiction book features that can be categorized as those

which deal with detachment from self received mid- to upper-level agreement. These features

include reading as a form of escapism, to live vicariously through characters' lives, and because

they make respondents feel like they are in the story. A fourth item, question 26, which

demonstrates mid- to upper-level agreement with a statement regarding reading because books

place vivid pictures in the reader's mind, can potentially be placed in this category as well.

Given these data, the conclusion can be drawn that respondents value this medium mostly

because it provides them with detachment from self. With the possible exception of watching

video clips, this is contrary to the Internet features that respondents indicated they use most

frequently. Thus , it appears that respondents value fiction books and the Internet for entirely

different reasons, and that they fulfill different needs.

Research Question Five asked, "To what extent do heavy and light leisure Internet users

differ in their self-reported preference in reading a paper version of a fiction book that includes a

supplemental website containing multimedia content, or an online version of a fiction book that

has in-text links to multimedia content?" This question attempts to determine whether Internet

features can be incorporated with fiction book features in order to increase respondent interest in

reading fiction books overall. Therefore, data gathered previously were examined against results found in this research question.

To determine respondent preference for a paper version of a fiction book that included a companion website with multimedia features, five survey items were used. Respondents were asked to rate their level of agreement with statements regarding four potential companion website features (concept art, animated short films, music, and discussion boards), as well as whether their interest in reading for enjoyment would increase if such a website were offered, on an interval-level scale of one to seven, where one was "strongly disagree" and seven was "strongly agree" (questions 32-36). To determine respondent preference for an online version of a fiction book that includes in-text links to multimedia features, respondents were likewise asked to rate their level of agreement with statements similar to those mentioned regarding companion websites (questions 37-40). With one exception, differences between heavy and light Internet users were not statistically significant. The statistically significant survey item was question 40, which rated respondent interest in reading an online fiction book that contained in-text links to discussion boards [t = -2.599 df = 158 p = .018]. Both Internet user groups indicated a low level of interest, with heavy Internet users expressing a slightly higher level of interest in the feature, with a mean of 2.03 for light Internet users and a mean of 2.63 for heavy Internet users. These results can be compared to frequency of use data gathered for Research Question Three, where a statistically significant difference was found between heavy and light Internet users in regard to the frequency with which respondents used message boards. Both Internet user groups indicated low frequency of usage, with heavy Internet users indicating slightly higher usage, at the "once a month" level. This might explain the reason for the statistical significance of the difference

between heavy and light Internet users in regard to question 40. However, as no statistical

significance was found in the discussion board counterpart where companion websites are

concerned (question 35), it is difficult to make a concrete assessment.

When responses to statements for both companion website and online book options are

examined as a whole, respondents overwhelmingly indicated a low level of interest in the

features, with the highest mean being 3.65. Table 6 outlines the statements and means:

Statement	Mean Light/Heavy
I am interested in reading a fiction book that has a companion website that includes concept art based on the book.	2.61
	3.25
I am interested in reading a fiction book that has a companion website that includes animated short films based on the book.	2.90
	3.46
I am interested in reading a fiction book that has a companion website that includes music inspired by the book, or music that inspired the author to write the book.	2.81
	3.24
I am interested in reading a fiction book that has a companion website that includes discussion boards where I can participate in conversations about the book with others who have read it.	2.37
	3.65
I would be more interested in reading for enjoyment than I am now if a companion website with the features mentioned above were available.	2.48
	3.08
I am interested in reading a fiction book online that has in-text links to concept art based on the book.	2.38
	2.79
I am interested in reading a fiction book online that has in-text links to animated short films that reenact a scene I just read.	2.21
	2.55
I am interested in reading a fiction book online that has a musical score that follows me along as I read.	2.29
	2.45
I am interested in reading a fiction book online that has in-text links to discussion boards where I can discuss the scene I just read, or discuss the book up to that point.	2.03
	2.63
I would be more interested in reading for enjoyment than I am now if an online version of a book with the features mentioned above were available.	2.29
	2.78

Table 5: *Companion Website and Online Book Mean Comparisons*

While most were not statistically significant, heavy Internet users indicated a slightly

higher interest level for each feature than did light Internet users. While the low-level interest in

these options may very well be due to pure lack of interest in companion websites or online books, it is possible that the low-level interest is due to the fact that they were being asked to evaluate something that does not exist. In such instances, it is difficult to accurately gauge interest because there is a significant difference between imagining what it would be like to use something and actually using it.

Now these responses must be compared against responses gathered for other research questions, as well as survey items independent of research questions. Both Internet user groups indicated that they enjoy reading fiction books for entertainment (survey question 27), so it can be assumed that the interest in the features is not a result of lack of interest in reading in general. Data gathered for Research Question Two, which analyzed respondent interest in websites that include multimedia versus strictly text-based websites show mid-level agreement. By contrast, respondents indicated low-level interest in the multimedia features put forth in statements regarding both companion websites and online books. This indicates that the addition of multimedia features simply does not increase respondent interest in reading fiction books, and has nothing to do with the appeal of multimedia features themselves.

Comparing results for Research Question Five to those for Research Question Three, which analyzed the frequency of usage of a number of Internet features, bolsters this argument. When similar media are compared, this pattern continues. Respondents indicated mid-level frequency of use of the Internet to listen to music, yet indicated low-level interest in the music options for both companion websites and online books. The animated short film option posed for both companion websites and online books likewise received low-level interest, yet respondents indicated mid-level usage of videos in the Internet features section of the survey.

While both television and movies received low frequency of usage results in that section, the videos option is the most appropriate item to use as a comparison due to length. Respondents indicated higher frequency of usage of the Internet to watch television shows as opposed to movies, so this, too, can potentially be used due to its shorter length. Respondents' level of interest in discussion boards was in line with the low level of message board usage that respondents reported in the Internet feature usage section. However, the discussion board option can also be linked to the interpersonal communication group outlined in Research Question Three overall, and as social networks and instant messaging are used frequently by respondents, this can be seen to again indicate that low interest is due to the companion website or online book itself. The concept art option cannot be linked to any Internet features analyzed previously, but similarities can potentially be drawn between this option and survey item 26, which analyzes whether respondents enjoy reading because it places vivid pictures in their mind. Again, respondents indicated a low level of interest in this feature for both companion websites and online books, yet they indicated upper-level agreement with question 26. It is possible, then, to use this contrast as further argument that negative responses were due to lack of interest in the companion websites and online books overall. However, this is a tenuous association, as picturing something and looking at pictures are entirely different things.

The final comparison that can be made between Research Question Five results and others focuses on respondents' level of agreement with survey items that stated that they would be more interested in reading for enjoyment if either a companion website or an online book were available (questions 36 and 41). Respondents indicated a low level of interest in both options. This falls in line with responses gathered when respondents were asked how frequently

they used the internet to read fictional stories (question 7). Means for both heavy and light

Internet users were in the "very seldom or never" or "once every few months" categories. This

indicates that respondents might have little interest in reading fiction online in general. While

they indicated frequent usage of the Internet for news and looking up information, these are quite

possibly a matter of convenience rather than a reflection of how much they like to read online.

Thus, the conclusion can be made that respondents simply are not interested in reading fiction

online, and that incorporating multimedia features with fiction literature does not increase

interest in reading.

Conclusion

Overall, this study concludes there is little difference between the reading habits and

interest in reading between heavy and light Internet users. In addition, there is little indication

that the Internet has displaced reading for enjoyment among respondents. Both Internet user

groups indicated that they enjoy reading. Both indicated mid-level preference of websites that

employ multimedia features versus text-only websites. Heavy Internet users understandably

make more frequent use of all Internet features (RQ3) outlined in the survey, with statistically

significant high levels of frequency occurring in looking up information, watching videos, and

instant messaging. Also statistically significant, yet scoring low on the frequency of use scale,

were reading fictional stories, watching movies, playing RPGs, blogging, and using message

boards. Statistically significant middle-ground usage differences between the Internet user

groups occurred in the television shows feature.   Internet features of the greatest popularity

proved to be news, looking up information, watching videos, email, instant messaging, and social

networks. The most dominant feature type was those pertaining to interpersonal communication,

indicating that respondents tend to view the Internet as a tool for social interaction. Respondents tend to make secondary use of the Internet as an information gathering tool, which is likely due to the fact that the Internet is a convenient way to obtain up-to-date information quickly.

When reasons for reading fiction books for enjoyment were evaluated (RQ4), the most popular reasons were using books as a form of escapism and entertainment, having vivid pictures in readers' minds as they read, and being made to feel like the reader is in the story. The first three of these showed a statistically significant higher level of agreement among heavy Internet users. These responses indicate that respondents value reading fiction literature because it allows for detachment from self, and when comparing responses to these survey items with responses to Internet feature survey items, the conclusion can be drawn that respondents value the Internet and fiction books for different reasons, and that they serve entirely different needs.

Respondents indicated a low level of interest in reading a book with a companion website that included specific multimedia features or reading an online book with in-text links to similar multimedia features. It appears that the inherent differences between the reasons why people use the Internet versus why they read fiction books make them today incompatible. The two media serve different needs, and people are hesitant to combine the two. There are many other possibilities for why respondents showed such little interest in these options, such as their inability to properly gauge their interest in something that does not exist, or a possible aversion to reading from a screen for long lengths of time, but further investigation would be needed to determine whether these factors had an effect on results. Additionally, because it appears that respondents' reading rates did not change after they began to use the Internet, such options might be entirely unnecessary. If further studies find that displacement has indeed occurred, it seems

that publishers might have to come up with different ideas from those posited here to increase

public interest in reading.

Limitations

There are three major limitations to the current study. First, a convenience sample of

students at a single college was used. The respondent base was not representative of the actual

population of the United States. This convenience sample also consists largely of people in their

late teens to early twenties, which is not representative of the actual population either. The age

factor might also have affected reading rate before and after the Internet data, since respondents

in general were likely exposed to the Internet at an early age. Additionally, it is possible that

there are regional differences that cannot be accounted for due to the fact that all respondents

reside within the same area. Second, the survey collects self-reported data. Self-reported data

are known to have a potential for inaccuracy because there is no method available to determine

the accuracy or honesty of participants' responses. Third, the survey questions associated with

Research Question Five were hypothetical; because respondents did not have actual access to or

experience with companion websites or online books with multimedia features, there is a

potential for inaccurate results.

Suggestions for Further Research

The current study puts emphasis on electronic media, probing reasons why people use the

Internet and attempting to assess the degree of increased interest in reading fiction books for

leisure if the Internet is used to supplement such reading. While some conclusions can be drawn

regarding displacement of fiction books by the Internet, further research should focus on

determining the extent of displacement in greater detail across a wider age demographic. The

potential effect that other media, such as television, have had on reading should be analyzed as well. Future studies should also put more in-depth focus on tools that can be used to increase interest in reading by developing companion websites and online books with multimedia features, having respondents use them before answering questions about their interest in them. Additionally, further research should be conducted to determine potential effects that the Internet has on a person's ability to read printed text. Acquiring such data will assist scholars to further understand potential reasons or causes for displacement of not only fiction books, but print media in general.

Appendix A: Literature Search Procedures

Two searches were conducted on 8 December 2008 on the online search engine, Google. One search was worded "US Census Bureau home Internet use." The second was, "To what extent does Internet use effect people's use of other media in the US?" Additional Google searches were conducted on 12 February 2009. They were worded, "media displacement theory originator," "displacement theory originator," "who coined the term media displacement," and "who coined the term displacement."

On 8 December 2008 and 21 January 2009, the EBSCO database was searched using the following terms: impact of Internet on books, displacement, media displacement, and media substitution. On those same dates, the ProQuest database was searched using the same terms. ProQuest was also searched on 21 January 2008 using the term "impact of Internet on television" and was again searched on 11 February 2009 using the term "book publishing industry." On 30 January 2009, the ProQuest database was searched again using the term "publishing industry and books."   The LexisNexis Academic database was searched on 11 February 2009 as well, using the same search term, "book publishing industry."   It was searched once again on November 9, 2009, using the term "study on impact of television on newspapers."

On February 13, 2009, the JSTOR database was searched for a specific article. A title search was conducted using the term "the effects of television on the reading and the buying of newspapers and magazines." This article was cited in a previously-acquired document, which provided the impetus for this search. On November 10, 2009, the EBSCO database was searched for "the world wide web as a functional alternative to television", an article title that was cited in a previously-acquired document.

Appendix B: Survey

Below are questions regarding your fiction reading and use of the Internet for enjoyment. The questions are centered solely around time you spend on these activities for enjoyment, not for work or school-related purposes. There is no right or wrong answer to any question. Your honest opinion is what is being sought, and your responses will remain anonymous.

First we'd like to learn how often you read for enjoyment and use the Internet for enjoyment. Please answer the following questions regarding your reading and Internet usage frequency. Please answer using numbers and estimate to the best of your ability.

1. In the <u>past four weeks</u>, how many fiction books have you read for enjoyment? _____

2. Thinking about <u>yesterday</u>, how many hours did you spend on the Internet for enjoyment? - ____

3. Now, thinking about <u>the day before yesterday</u>, how many hours did you spend on the Internet for enjoyment? ____

4.   Before you began using the Internet, which statement below best describes your reading of fiction books a month for enjoyment?
    □ I read more fiction books before I began using the Internet.
    □ I did not read more fiction books before I began using the Internet.
    □ I have used the Internet my whole life, so I can't judge.

Now we'd like to learn about how often you use the Internet for various purposes.

Below is a list of 15 reasons for which people say they go to the Internet. For each reason, please rate how often you use the Internet during your leisure time, where 1 is "very seldom or never" and 7 is "multiple times a day":

I use the Internet for	Very seldom or never	Once every few months	Once a month	A few times a month	Once every few days	Once a day	Multiple times a day
5 News	1	2	3	4	5	6	7
6 Looking up information on various subjects	1	2	3	4	5	6	7
7 Reading fictional stories (of any length)	1	2	3	4	5	6	7
8 Making purchases	1	2	3	4	5	6	7
9 Listening to music	1	2	3	4	5	6	7
10 Watching television shows	1	2	3	4	5	6	7
11 Watching movies	1	2	3	4	5	6	7
12 Watching video clips	1	2	3	4	5	6	7
13 Playing role playing games	1	2	3	4	5	6	7
14 Playing non-role playing games	1	2	3	4	5	6	7
15 Email	1	2	3	4	5	6	7
16 Instant messaging	1	2	3	4	5	6	7
17 Blogging	1	2	3	4	5	6	7
18 Message boards	1	2	3	4	5	6	7
19 Social networks	1	2	3	4	5	6	7

Next, we'd like to learn about your reasons why you read fiction books outside of work or school.

There are seven statements below. Please indicate your level of agreement with each of the following statements regarding why you read fiction books for enjoyment, where 1 is "strongly disagree" and 7 is "strongly agree":

		Strongly Disagree						Strongly Agree
20	I read fiction books for enjoyment to learn about other eras	1	2	3	4	5	6	7
21	I read fiction books for enjoyment to learn about other societies	1	2	3	4	5	6	7
22	I read fiction books for enjoyment to live vicariously through the characters' lives	1	2	3	4	5	6	7
23	I read fiction books for enjoyment as a form of escapism	1	2	3	4	5	6	7
24	I read fiction books for enjoyment as a form of entertainment	1	2	3	4	5	6	7
25	I read fiction books for enjoyment because reading books makes me feel like I'm in the story	1	2	3	4	5	6	7
26	I read fiction books for enjoyment because reading books places vivid pictures in my mind as I read	1	2	3	4	5	6	7

And now please express your opinions regarding both reading and Internet usage.

For the five statements below, please indicate your level of agreement with each statement, where 1 is "strongly disagree" and 7 is "strongly agree":

		Strongly Disagree						Strongly Agree
27	I like reading fiction books for enjoyment.	1	2	3	4	5	6	7
28	Websites that use multimedia features are more appealing than websites that only use text.	1	2	3	4	5	6	7
29	I am more interested in surfing the Internet than I am in reading a fiction book.	1	2	3	4	5	6	7
30	If I did not have access to the Internet, I would spend more time reading fiction books.	1	2	3	4	5	6	7
31	Before I began using the Internet, I read more fiction books a month than I do now.	1	2	3	4	5	6	7

The next section has ten statements. Here, we'd like you to think about the options being proposed in each statement and give us your opinion about them. The first five items are regarding a paper version of a book that has a companion website, and the last five items are regarding an online electronic book.

Please indicate your level of agreement with the following statements, where 1 is "strongly disagree" and 7 is "strongly agree":

		Strongly Disagree						Strongly Agree
32	I am interested in reading a fiction book that has a companion website that includes concept art based on the book.	1	2	3	4	5	6	7
33	I am interested in reading a fiction book that has a companion website that includes animated short films based on the book.	1	2	3	4	5	6	7
34	I am interested in reading a fiction book that has a companion website that includes music inspired by the book, or music that inspired the author to write the book.	1	2	3	4	5	6	7
35	I am interested in reading a fiction book that has a companion website that includes discussion boards where I can participate in conversations about the book with others who have read it.	1	2	3	4	5	6	7
36	I would be more interested in reading for enjoyment than I am now if a companion website with the features mentioned above were available.	1	2	3	4	5	6	7
37	I am interested in reading a fiction book online that has in-text links to concept art based on the book.	1	2	3	4	5	6	7
38	I am interested in reading a fiction book online that has in-text links to animated short films that reenact a scene I just read.	1	2	3	4	5	6	7
39	I am interested in reading a fiction book online that has a musical score that follows me along as I read.	1	2	3	4	5	6	7
40	I am interested in reading a fiction book online that has in-text links to discussion boards where I can discuss the scene I just read, or discuss the book up to that point.	1	2	3	4	5	6	7
41	I would be more interested in reading for enjoyment than I am now if an online version of a book with the features mentioned above were available.	1	2	3	4	5	6	7

Last, the following four items will be used for statistical purposes only and will not be used to identify you.

42. Age: ____

43. Gender:
   ☐ Male
   ☐ Female

44. Into which category of student status do you fall?
   ☐ Undergraduate
   ☐ Graduate
   ☐ Doctoral
   ☐ None of the above

45. What is your major? _____

Appendix C: Cover Letter

Subject: Internet Usage and Reading Survey for Research Study

Body:

Dear Fellow Student,

My name is Jessica Cole, and I am a graduate student in the Communication and Media Technologies program here at RIT. I am conducting a survey regarding leisure Internet usage and leisure reading habits, as well as gauging interest in a couple of innovative methods that publishers might be able to use to attract readers. Leisure reading rates in the United States have been falling for over a decade, and it is suspected that the Internet has something to do with it. Publishing companies are in danger of going out of business. It is my hope that this study will help determine whether the Internet is partially to blame for this decrease, and whether the Internet can be used to make reading more appealing to people, and thus help keep publishing companies in business for many years to come.

I would very much appreciate it if you'd be willing to take a moment to complete this survey. It should take you no more than 10 to 15 minutes to complete the survey, were strictly confidential and anonymous, and your feedback would be greatly valued. Participation is voluntary and you can exit the survey at any time without penalty. There are no risks involved in participation. As I stated previously, you will remain completely anonymous – even I won't have access to personal information on participants. If you are interested in taking this survey, please click on the link below and you were directed to a site where you can complete the survey online.

Please go to http://clipboard.rit.edu/take.cfm?sid=ECD7B729 to take the survey.

The results of this study were made available to the RIT community. Should you wish to receive a summary of the results, please write to jas5876@rit.edu providing your email address and a summary were emailed to you. If you have any questions or concerns regarding this survey, please direct them to that address as well.

Thank you very much for your time, and I look forward to your response.

Sincerely,
Jessica Cole

Subject: Internet Usage and Reading Survey for Research Study

Dear Fellow Student,

Two weeks ago you were sent an email asking you to participate in a research study that I am conducting regarding leisure Internet usage and leisure reading habits. I am touching base with you to remind you about the study, and to encourage you to participate if you have not already done so. I would greatly appreciate your participation, as it will help me achieve accurate results. As I stated in my original email, it should only take 10 to 15 minutes to complete and participants will remain completely anonymous; I will have no access to names or any other personal information.

To participate in the survey, please follow this link:
http://clipboard.rit.edu/take.cfm?sid=ECD7B729

For those of you who have already taken the survey, thank you very much. Your input was valuable, and I sincerely appreciate your taking the time to help me gather my data.

Sincerely,
Jessica Cole

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