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GRATIFICATION NICHES OF MONTHLY PRINT MAGAZINES
AND THE WORLD WIDE WEB

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Quint Bryce Randle

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GRATIFICATION NICHES OF MONTHLY PRINT MAGAZINES
AND THE WORLD WIDE WEB

By

Quint B. Randle

AN ABSTRACT OF A DISSERTATION

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ABSTRACT

GRATIFICATION NICHES OF MONTHLY PRINT MAGAZINES AND THE WORLD WIDE WEB

By

Quint Randle

Through the framework of niche theory, this study compared the gratification niches of traditional print magazines and the World Wide Web through a random mail and convenience email sample — two sub-samples of a population of subscribers to a special-interest print magazine. Three hundred and seventy-one users of both mediums responded to the survey. Relative to the Web, the presence of newer magazine gratification dimensions was identified as well as traditional dimensions supported. These included surveillance, diversion, career information, gratification opportunities, communication management and others. The relative array of gratifications offered (niche width), perceived similarities (niche overlap) and superiority of each medium were measured in total and for the individual gratification dimensions.

For these users, the Web offers a wider array of gratifications than magazines, and delivers them in a superior fashion. As Web use increases, these perceptions increase as well. The greatest differences between magazines and the Web in gratifications offered and superiority tend to be in the cognitive, information-gathering and communication management functions. Meanwhile, the least differences appear in the more affective and diversionary functions.

The Web and magazines are perceived to be least similar in the information-gathering and communication management functions. They are perceived to be most similar in the affective, or diversionary functions. Decreasing magazine users place more emphasis on the superiority of the Web's information-gathering and communication management characteristics. Increasing and static magazine users seem to place more emphasis on the affective functions of magazines.

Supporting the notion of a catalyst effect, increasing magazine readers use the Internet at the same rate as decreasing magazine users, both at a higher rate than static magazine users. Increasing and decreasing magazine use is not driven by age, or by how long one has been using the Internet. A key variable that seems to be driving increasing or decreasing magazine is whether individuals prefer to engage in these more affective functions in a tactile or electronic environment.

Based on these findings, a number of managerial recommendations are offered to help print magazine publishers create a successful Web publishing model, incorporating both free and paid content.

DEDICATION

To Leslie, my wife, and to my parents, Clayton and Betty.

ACKNOWLEDGEMENTS

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CHAPTER 1

Statement of the Problem

Introduction

With the popularity and interactivity offered by the Internet and World Wide Web, media organizations see the Web as a medium they must conquer if they are going to survive. They have good reason to be concerned. From an historical perspective, whenever a new medium reaches critical mass it threatens to, and does, displace existing media to some degree. For example, the upstart television industry took consumers and advertisers away from the radio industry back in the 1940s and 1950s. The revolution of special-interest niche magazines began back in the early 1970s when the magazine industry reacted to the loss of national advertising and eventual failure of mass circulation, general interest magazines due to the increasing use of television by both consumers and advertisers (Gage, 1982; van Zuilen, 1977).

But what makes the World Wide Web so different from, and more threatening than, previous introductions of new media is that it offers, and will increasingly offer as bandwidth increases, all three "personalities" that used to distinguish mass media from one another — print, audio and video. For example, Web-based information providers especially threaten conventional newspapers because they can deliver text and images more quickly and in a more organized manner than print. With the immediacy of broadcast media, Web technology can distribute what is in essence the printed page.

Magazines and the Web

Magazines, however, face somewhat different issues than newspapers because they have not historically been the deliverers of

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timely information. They face competition from Internet-only e-zines, which have virtually no traditional paper, printing or distribution costs, and are better versed in new media interactivity. Because of this they are able to serve even more specialized vertical communities — a function similar to today's special interest and trade magazines. Magazines also face the television and radio industries' entry into the text-based medium now available through the Internet. In sum, the 4-color, text-based medium that magazines used to "own" has in many ways become available to virtually anyone with Web technology.

As a competitive threat, the Web can be perceived in two ways. First as simply another mass information or entertainment medium competing for consumer time — a relatively constrained resource. But the Web is also threatening because it can replace or serve the same specific functions as traditional magazines.

The Web and Consumer Time

In the last several years, the number of Internet users has hit critical mass. According to "The UCLA Internet Report: Surveying the Digital Future," nearly 70% of Americans are using the Internet. (Cole, 2000). An Internet ratings company, the Nielsen//Netratings Audience Measurement Service (sister company to television's Nielsen ratings), estimates that in December 2000 there were nearly 160 million U.S. residents living in households with Internet access (2001b).

Web surfing was the top activity of the respondents in the UCLA report, with just over 80 percent using the Internet for Web browsing (beating out email by less than one percent). Subjects reported using the Internet for finding hobby and entertainment information, as well as

reading news. These functions are associated with the traditional use of magazines and newspapers.

Internet studies have tended to find that Internet users generally employ more media than non-users (Cole, 2000), but several studies have shown that those reporting less magazine use overall, outnumber those reporting more magazine use since becoming a Web user (Stempel, Hargrove, & Bernt, 2000; FIND/SVP, 1997). Another recent study, that did not address magazines specifically, found that time spent watching TV and reading newspapers decreased as online use increased, pointing to a displacement effect (Kayany & Yelsma, 2000).

Meanwhile, magazine publishers are trying to find ways to best capitalize on the Internet without cannibalizing their own readers and advertisers (Marlatt, 2001; Woodard, 2001). According to a survey in *Folio Magazine*, a leading trade publication, 54.5 percent of the sampled magazine professionals feel that the integration of print and digital media is a top issue facing the industry — second only to circulation economics (Folio, 2001).

And while the same survey reported that respondents were feeling less threatened by the Internet for advertising market share than the previous year, more respondents believed they were losing their readers' time to the Internet:

> There's no doubt that the Internet's popularity as an information provider has soared. In 1999, 23.7 percent of publishers maintained that their magazines were not losing any reader time to the Web. In 2000, that confidence level dropped 17.6 percentage points, with only 6.1 percent of respondents still sure that their readers were not being lured away by the Web. (Folio, 2001, p. 51)

<u>Justification</u>

"The trick," for print media as offered by one author, is to excite readers' interest in "print products through glamour and added dimensions of the Web without losing the lure of print" (Villano, 1999). This sounds like a logical solution, but leads to several important questions: What exactly are the added dimensions of the Web? What comprises the continuing lure of the print? And how do they overlap? In short, what are the strengths of the print medium that magazine publishers need to focus on, while at the same time capitalizing on the strengths of the Web medium?

These are some of the general questions this study sets out to answer through a review of the literature, subsequent research questions, hypotheses and survey of magazine readers. For magazine publishers to find their competitive place among the new and traditional media, they must better understand how the two mediums compete and how they might complement each other.

This study explores one of the most important issues facing today's magazine industry: Can the Web fulfill the same gratification needs previously offered by magazines? On what gratifications do magazines excel over the Web and vice versa? Rather than analyzing circulation trends and advertising sales figures, this study directly addresses the end user. Ultimately, individual consumers — minute by minute, hour by hour — will decide the relative popularity of both magazines and the Web through how and how often they use them.

This study, and how it will be executed, is significant because it may detect relatively early tendencies for readers to prefer one medium over the other, and specifically along what dimensions of use. These

preferences may not play out into circulation declines for a number of years. By identifying specific gratifications, strengths and weaknesses, of these two mediums relative to one another, publishers will be better prepared to make long-term editorial and strategic business decisions. Through a better understanding of the added dimensions of the Web — and more specifically — what differentiates magazines from the Web and vice-versa, conventional magazine publishers will be better prepared to compete beyond the new millennium.

Theoretical Framework

Niche theory provides an appropriate framework to examine to what degree these media compete at a functional level for audience attention. Originally based in population ecology, niche theory explains how animal populations compete for resources within a defined environment and can provide general predictions as to the potential for cohabitation or extinction (Stiling, 1999; Arthur, 1987; Whitaker & Levin, 1975). It has been borrowed and adapted to a variety of fields including marketing (Li & Kuo, 2000; Lambkin, 1990) and the media (Dimmick, Patterson, & Albarran, 1992; Dimmick & Rothenbuhler, 1984). For example, in terms of the media, niche theory has been used to explain the effect on advertising revenues of new media — television — invading the environment of old media — radio (Dimmick & Rothenbuhler, 1984).

Other studies have utilized the theory of the niche, combined with measurement and factor analysis methodologies of the uses and gratifications perspective (Blumler & Katz, 1974), to measure consumer gratifications of new and old media. The first phase is to identify and measure the various dimensions of gratifications. The data are then analyzed utilizing theory of the niche formulae to calculate the breadth of

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a medium's niche (range of use), overlap of media use (to what degree they fulfill the same needs), and to ascertain competitive strengths and weaknesses from the perspective of individual gratifications. This helps identify which medium is more effective and in what areas (Dimmick, Kline, & Stafford, 2000; Dimmick, 1993). This study follows a similar pattern, comparing the gratification niches of conventional magazine use to those of the World Wide Web.

Purpose Statement

The purpose of this study is to use niche theory to measure and then make general predictions as to the potential for competition and displacement between two media populations: traditional print magazines and World Wide Web sites. Niche theory suggests that when competition is high in a resource-fixed environment, and one population is superior to the other, one population will be displaced to some degree or another. The displaced population must adjust its resource use in order to survive. This study surveyed magazine and Internet users to assess the level of competition and superiority in the area of gratifications, a key predictor of audience attention and use. A secondary purpose is to examine the effect of several independent variables — level of use, type of media, demographics and others — on several dependent, niche-oriented variables — breadth, overlap and superiority.

Summary

In conclusion, the goal of this paper is to identify the strengths and weaknesses of the Web and print magazines relative to one another on specific dimensions of gratifications. It addresses the potential effect of the availability of new media, more specifically Internet Web sites, on the

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reading habits of magazine readers or subscribers. This chapter has provided a basic overview of the study.

Prior to a theoretical literature review, an historical overview of the impact of earlier new media on magazine publishing is presented. The purpose of this is to provide more context and perspective on today's new media environment and the study at hand. In the literature review, Chapter 3, the theory of the niche will be explained and related concepts, definitions and studies highlighted. The theoretical construct of media gratifications will also be examined, because use statements are utilized as a measurement tool in audience-oriented niche studies.

At the conclusion of the literature review, six research questions and eight hypotheses are presented. Chapter 4 then gives the methodology used to execute the study. In addition to using somewhat established magazine and Internet use statements, a qualitative pre-survey was conducted to collect newer use statements relative to both mediums.

Then, 371 special interest magazine subscribers and Internet users (of the same magazine) were sampled to take a self-report questionnaire. The results of the research questions and statistical analysis are presented in Chapter 5, which is then followed by a discussion of the implications of the findings, the study's weaknesses and suggestions for future research in Chapter 6.

CHAPTER 2

Magazines and New Mass Media: An Historical Perspective

<u>Introduction</u>

Before launching into a review of the literature directly related to niche theory and gratifications, this chapter provides an historical overview of the effects of new mass media on magazine publishing in the United States. Some of industry's major developments and trends are examined in light of the introductions of new mass media. Within the framework of this study, new media are considered new forms of mass communication or entertainment media that threaten to take readers or advertisers away from magazines.

The major mass media types that have been introduced since the beginning of the 20th Century include motion pictures, the phonograph record, radio, television, the personal computer, video cassettes, video games and the Internet. Some of these media introductions have had major negative impacts on magazines: television stealing readers and advertisers resulting in the eventual extinction of the general interest, mass circulation magazines in the late 1960s and early 1970s (van Zuilen, 1977). Conversely, the births of other new media have had positive effects on the magazine industry. For example, the growing penetration and popularity of the personal computer during the 1980s motivated millions of information-hungry readers and special-interest advertisers. Each introduction of a new brand of personal computer or even model number was followed immediately (or concurrently) by the launch of several competitive magazine titles in the 1980s (Maryles, 1983; N.Y. Times, 1983, Nov. 9).

Each time a new medium is introduced it does threaten to and displace existing media to some degree or another (Dimmick & Rothenbuhler, 1984). An historical perspective on both the perceived threats at their introduction, and the general effects of new media on magazines throughout this century will provide a better understanding as the current media landscape — the potential effect of the Web on magazine publishing — is explored.

<u>Magazines in America</u>

Magazines have been a part of American culture since *American Magazine* was first published in colonial America (Paneth & Facts on File Inc., 1983). By 1825 there were an estimated 100 magazines being published. This figure grew to more than 600 in 1850, with another four or five thousand titles having come and gone during that 25-year span (Schmidt, 1980). But even with such popularity, magazines were considered a medium of leisure. As Peterson outlines:

> So long as people were preoccupied with earning a living and pushing back the frontier, so long as leisure and literacy were not widespread, so long as transportation was rudimentary and uncertain, magazines lived precariously. (Peterson, 1980, p. 166)

Until the end of the 1880s these magazines relied primarily on subscription revenues or the wealth of their publishers to cover expenses. "A publisher started a magazine because he had something to say" (Bart, 1962, p. 32). Money was not the main motivation: "Magazines, except for a few local publications or trade papers, seldom contained advertisements" (Douglas, 1991, p. 15). Even so, the post-Civil war economic boom saw the number of magazines being published jump from 700 in 1865 to 3,300 in 1885 (Peterson, 1980).

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Towards the end of the 19th Century, due to the mass production of consumer products and the evolution of brand names, "the modern magazine arose in the 1890s as a handmaiden of the marketing system ... New products were appearing in profusion" (Peterson, 1980, p. 166). Publishers began to realize that magazines could be a vehicle to showcase merchandise, not just ideas (Bart, 1962). By 1900 major advertisers were pouring money into all of the popular magazines (Douglas, 1991).

With the turn of the century also came increasing technological advances as well as more leisure time for Americans, both of which would bolster the popularity of magazines. For example:

> By the early 1900s the physical appearance of magazines was transformed by the new dry-plate processes by which pictures, line drawings and photographs could be printed as half-tones.... Widespread use of this process followed, with the increased opportunity for magazines to become designed objects, not merely collections of type with occasional woodcuts or steel engravings. (Schmidt, 1980, p. 11)

While black and white photography played a prominent role, four-color printing would be commercially viable soon. *National Geographic* was publishing four-color editorial as early as 1910 (Edkins, 1978). At this time, newspapers and books were the main competitors of magazines (Peterson, 1956). But a new mass medium was on the horizon — one that did not require reading.

Motion Pictures

The three mass media competitors at this stage of development were all text-based: newspapers, books and magazines. The first new

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mass medium to affect magazines was film, which entered the realm of mass media in 1904 as *The Great Train Robbery* drew in moviegoers. The proliferation of movie magazines began around 1911 and continued into the 1940s (Peterson, 1956). "Magazines for movie fans began to appear when motion pictures moved from the shady atmosphere of the nickelodeon into grand houses of their own.... Throughout the twenties, thirties and forties, new titles were forever appearing on newsstands" (Peterson, 1956, p. 281-282).

In 1922, average weekly movie attendance was 40 million with an average weekly household attendance of 1.56. This continued to grow until weekly attendance peaked out at 90 million in 1948 with an average weekly household attendance of 2.22 (Salvaggio & Bryant, 1989).

But because the film industry relied solely on consumer ticket purchases for revenues, not on advertising income as well, the economic impact on magazines was not necessarily a negative one. While ticket costs and the recreational time required to attend motion pictures did eat away at leisure dollars and hours, the new medium spurred an interest in movie stars' lives both on and off the screen. These publications "satisfied the public curiosity about what was happening during the golden age of Hollywood" (Tebbel, 1969, p. 239-240).

One early readership study showed some empirical evidence of a complementary relationship between movies and magazines. In this effort to examine environmental factors affecting readership, the authors (Lazarsfeld & Wyant, 1937) compared the circulation of 25 leading magazines in 90 U.S. cities with seven geographic and socioeconomic variables, including occupational structure, educational expenditures and the number of movie houses in a city.

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They first established that large populations were associated with lower readership levels, perhaps because "larger cities offer a greater number of diversified amusements" (p. 33). But the authors then found a moderate positive relationship (r = .38 being the only statistic reported) between the number of movie houses in a city and the readership variable. They concluded, "Clearly, a rise in the number of movies results in an increase in reading interest" (p. 34).

In further analysis of the circulations of specific magazines, they reported a particularly strong positive relationship between the number of theaters in a city and the circulation of *Red Book* magazine. "One possible reason for this correlation is that the type of story in *Red Book* is especially similar to the type of story portrayed on the screen" (p. 38). This study supports the idea that sometimes-similar subject matter creates a complementary effect between media, rather than a displacement effect.

Between 1911 and 1938 alone, 60 consumer magazines and nearly 90 trade and in-house publications were founded that addressed the subject of films, cinema, movie stars and production (Lomazow, 1996). Some of the more memorable startups of the first half of the 20th Century included *Photoplay* (1911), *Picture Play* (1915), *Screen Play* (1925), *Screen Romances* (1929), *Movie Life* (1937) and *Movieland* (1942) (Peterson, 1956). Thus, a whole new category was created and numerous magazines were launched to satisfy the appetite of the millions of fans of this new sensation called Hollywood and the business and industry that accompanied it.

Today there are not nearly as many specific movie star magazines being published; average weekly movie attendance is approximately a

third of what it was at its peak in the 1940s (Salvaggio & Bryant, 1989). But the public's seemingly unending interest in stars and the intimate details of their lives is reflected in the large circulations of many leading consumer magazines. *People Weekly* (4.1 million), *Teen People,* (1.6 million), *Rolling Stone* (1.2 million), *Us* (1 million) and leading women's magazines all rely heavily on reader interest in the stars produced by movies and the media-infatuated popular culture. Today, the leading general circulation magazine devoted solely to the movies is *Premiere* with a circulation just more than 600,000 (ABC, 2001). However, there are still many other smaller circulation titles covering different facets of the movies and its trades.

Radio

After the entrance of the motion picture as a competitive threat to magazines, the next new medium to enter the marketplace was radio. Prior to the advent of film "talkies," the first radio station with commercial sponsors and programming went on the air in Pittsburgh, towards the end of 1920 (van Zuilen, 1977).

Unlike motion pictures, this new mass medium relied on consumer time *and* advertising sponsor revenues. Radio grew rapidly in popularity, with NBC forming the first formal network in 1926 (Salvaggio & Bryant, 1989). The organization of network radio brought a greater competitive threat to magazines:

By the late twenties, radio was rapidly becoming an important competitor for advertising appropriations; the gross advertising carried by the networks jumped from $4,000,000 in 1927 to $10,000,000 in 1928 to $19,000,000 in 1929. Magazines recognized the threat; the *Saturday Evening Post* ran many articles

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about stage and screen but paid the scantiest of editorial attention to radio. (Peterson, 1956, p. 29)

Leading magazine publishers went so far as to seek the advice of university faculty because they were concerned about the loss of advertising to radio as well as the effects of the Great Depression (Peterson, 1980). Similar to the answer they might get today, the answer they got then was not surprisingly to improve their editorial focus and quality.

Radio reached its "Golden Age" during the 1930s when by 1934 half of the homes in the U.S. had radios (Media History Project, 2001). By 1940 there were more than 28 million households with radios, a penetration of just more than 80% (Salvaggio & Bryant, 1989). But while radio was reaching high penetration levels, publishers began capitalizing on new print technologies that would enhance what they could offer both readers and advertisers. This was something they would grow to rely on and would differentiate magazines from competing media for the next several decades:

> ... full-color photographic reproduction in the 30s started a new era of general magazine publishing ... In the Nov. 15, 1931 issue of *Vogue*, they made color history with a sensational color photography [sic] of fruit and silver.... From this time on *Vogue* enhanced its page with color, including during the Depression. (Edkins, 1978, p. 104)

The specific impact of the radio medium was apparently not substantial because by the mid-30s, "... publishers saw that radio was not eating into their share of total advertising appropriations" (Peterson, 1956, p. 30).

However, radio was still a threat to magazines, capable of taking away national advertising accounts. There was also the Great Depression to deal with. Perhaps because of these threats, and the fact that radio was not a visual medium, it was not embraced with numerous magazine launches in the same way film and Hollywood were embraced. Even so there was a "ready market for magazines carrying radio program schedules as long as many newspapers refused to list such schedules because of their feud with the new medium" (Peterson, 1956, p. 283). For example, with 17 regional editions, *Annenberg's Radio Guide* sold 420,000 in 1936.

While the further development of printing technology certainly played its part (Edkins, 1978), it is interesting to note the relatively parallel timeline of the peaking popularity of radio and the emergence of the picture magazine. Picture magazines and general interest titles would drive the industry well into the 1960s. The picture magazine can also be seen as a competitive response to radio's popularity among consumers. Radio was not a visual medium and could never become such. However, magazines were and could tell stories through pictures — large and small. Thus, as a medium, magazines altered their content, creating a new category — the picture magazine. As Peterson explains:

> ...the '30s belonged to the picture magazine. Anticipating the visual world of television, it surpassed even the condensations of the news weeklies and digest by summarizing in photographs instead of in text. So many picture magazines sprouted up in the mid-thirties that *Scribner's* entitled an article about them "One Every Minute." Their influences, especially the influences of *Life*

and *Look*, permeated the whole of American journalism. (Peterson, 1980, p. 168)

In 1977, Susan Sontag in *On Photography* offered one reason why photographs had such an impact on the American public, and in turn, on the popularity of the picture magazine: "A photograph passes for incontrovertible proof that a given thing happened. The picture may distort; but there is always the presumption that something exists, or did exist, which is like what's in the picture" (Sontag, 1977, p. 5).

While there were forerunners, the culmination of technological and competitive forces saw the launches of the two major picture magazines: *Life* in 1936, which was selling more than 1 million copies within just a few weeks of its introduction, and *Look* in 1937, which was selling 1.7 million copies before its first anniversary. There were a host of others, too. *Click*, which emphasized sex and shock, reached a circulation of 1.6 million. *Focus, Pic, Photo-history, Peek, Foto*, and *Picture* were just some of the other short- and long-lived titles that began or re-conceptualized in the 1930s. Ideas for picture magazines were so prevalent that one trade paper remarked, "... every advertising man carried a dummy for a picture magazine in his pocket" (Peterson, 1956, p. 313-314)

Today, all types of magazines use the radio airwaves to support subscription campaigns and single copy sales (Hovey, 1991). They have also found success in partnering with radio stations and networks to produce short audio segments highlighting the general or specific content of a magazine. Said one publisher: "It would be prohibitively expensive for us to buy this extensive kind of radio time.... It's a great way to give people a sense of the information that we provide in our issues" (Staff, 1997, p. 18).

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Sound Recordings

Another aural medium, the phonograph record, began its commercial ascent in the 1910s. But "beginning in 1922, radio interrupted the progress of the phonograph industry, and sales of both players and records dropped 50% by 1924 over the previous year" (Salvaggio & Bryant, 1989, p. 279). The impact of the World Wars and a musicians strike also stunted its growth. The phonograph record — which would eventually lead to other forms of sound recordings such as magnetic tape, compact discs and digital media — did not really take off until the late 1940s when the $33^{1/3}$ long-playing record (LP) and 45-rpm were introduced (Salvaggio & Bryant, 1989). *High Fidelity*, which launched in 1951, was the first U.S. magazine to address readers who didn't exist before 1940 — audiophiles (Nourie & Nourie, 1990).

"Recordings have, since their beginning, complemented and amplified many areas of publishing" (Brook, 1977, p. 72). The sound recording medium affected magazine publishing in much the same way film did. It was an entertainment medium that relied solely on consumer purchases, and did not rely on advertising. It was not as threatening as the radio medium. (But sound recordings were threatening to radio.) As the number of phonographs being shipped each year reached the million-mark in the early 1950s, the interest in music stars (and instruments) spawned new titles and eventually a new category of magazines.

In 1943, the N.W. Ayer directory listed only eight magazines in the music category, including *Song Hits* with a circulation nearly 450,000 (Sons, 1943). By 1970, the number of music magazine titles had grown to 32, including *Hit Parader* with a circulation of 216,575 (Sons, 1970). *Rolling Stone,* which was launched in 1967, quickly became a social,

political and cultural voice of a generation. By 1976 the magazine had a bi-weekly circulation of 500,000 (Nourie & Nourie, 1990). Today, with a circulation of 1.2 million (ABC, 2001), *Rolling Stone* appeals to both the younger music fan as well as the aging baby boomer.

According to one source, there are nearly 60 magazines being published in the music category today, not including trade magazines (S.R.D.S., 2001). But there are even more music titles according to the *National Directory of Magazines*. Over a 10-year span from 1989 to 1999, the music and music trades category was rated the third-fastest growing category in magazine publishing. There were 286 titles in 1989. By 1999 that number had risen to 519 (M.P.A., 2001a). And another source shows new music magazine launches in the Top 20 in 1999 (Husni, 1999). (The Magazine Publishers of America notes that there are a number of directories and sources that provide the number of magazines in the U.S. market, some more comprehensive than others. These include National Directory of Magazines, Standard Rate and Data Service, Audit Bureau of Circulations, BPA International, and the Publishers Information Bureau (M.P.A., 2001b).)

In addition to a heathly number of music titles today, roles have even reversed with publishers and record companies partnering to produce CDs targeted at readers of their magazines. A growing number of magazines — including major titles such as *Good Housekeeping* and *Esquire* — have licensed their names to record labels, producing CDs filled with songs that relate to their magazines (Beam, 1995). Said one VP of magazine brand development, "It's not going to make you a millionaire, but it's good for your magazine and good for your readers" (p. 32).

Television and Video

By the 1940s, the general interest, mass circulation magazines (with and without an emphasis on pictures) were well established. These include *Life, Look, Collier's, The Saturday Evening Post* and others. National magazines, with circulations in the millions, were an important part of national advertising strategies of virtually all major brand name products. In 1946 magazines held 12.6% of the total advertising market share (van Zuilen, 1977).

It was earlier that decade when television began its diffusion into U.S. households, but network television did not begin until 1949 (Media History Project, 2001). By 1956, television penetration reached 71.8% with 35 million sets (van Zuilen, 1977). As outlined by Dimmick & Rothenbuhler (1984), the growth in television advertising market share caused a serious drop in national radio advertising sales. Radio adjusted to this threat by focusing on local and regional advertising sales. Meanwhile, magazine publishers perhaps did not feel immediately threatened because in its first incarnation television did not offer 4-color advertising.

General interest consumer magazines continued to flourish throughout the 1950s and into the early 1960s. But as the cost of four color television sets decreased, and television's overall penetration went up — 97% by 1969 — the economic ride the general interest and picture magazines had enjoyed came to end. The immediacy and emotional depth of color television displaced the four-color general interest and picture magazines. By as early as 1956 television had 12.2 % of total advertising market share, while magazine advertising market share had dropped to 8% (van Zuilen, 1977).

As will be highlighted later, advertising-oriented theory of the niche studies have not included magazines due to the way advertising sales were tracked over the decades. But the effect that television had on the magazine industry has been noted by a number of authors and was made evident by the decline of the general interest magazines:

> No competitor ever gave publishers as many fretful hours as television, which grew rapidly in the postwar boom. Expenditures on television advertising — network, spot, and local — climbed from virtually nothing in the late 1940s to more than $1.7 billion in 1963... When magazine profits declined in the late 1950s and early 1960s, many observers were quick to blame the trouble on television. (Peterson, 1964, p. 24)

Through the marketing concept of "Product Life Cycle" van Zuilen (1977) thoroughly examined the economics of the rise and fall of the general interest mass market magazine and stated the following about the threat of television:

> During the 1950s and 1960s television became the arch enemy of mass audience magazines by siphoning away badly needed advertising revenues. This lack of advertising revenue, television's impact on tens of millions of fascinated viewers, followed by circulation battles among the magazines themselves, and coupled with all of this a lack of clear vision and often mismanagement, contributed to the decline and fall of the general interest mass audience magazines. (p. 31)

As mentioned in the above quote, television not only ate away magazines' national advertising market share, but it also took readers away — general entertainment seekers. "If the habit of nighttime

television viewing is heavy in the household, magazines pile up unread and there's little incentive to buy new copies" (Wolseley, 1965, p. 53). This is another reason why large general circulation magazines struggled. The general mass market magazines like *Life, Look* and others eventually failed due to a loss of two crucial resources: national advertising and consumer time, both of which were being successfully courted by the new four-color television medium.

Reacting to the loss of these resources, the magazine industry rebounded by developing an increasing number of special-interest magazines. This new resource was made up of readers who wanted specialized or more detailed information they couldn't get in the general electronic media, and advertisers who wanted to spend money on a more specific target audience. So, the magazine industry became more specialized leading to a proliferation of special interest magazines beginning in the 1970s on through to today (Abrahamson, 1996). This was the beginning of the trend known as niche publishing.

With even more increased specialization, when videocassettes and cable television began to reach critical mass in the 1970s and 1980s one might have predicted the death of reading because there was now a channel or videocassettes for just about every interest imaginable. However, just the opposite occurred. The magazine industry used television advertising and videocassettes as promotional giveaways providing added value for subscribers and attracting new ones (Dougherty, 1982). Who can forget the classic example: *Sports Illustrated* offering different videos "with your paid subscription" depending on the time of year and specific sports season. Getting the magazine was almost an afterthought to getting the free video. So in essence, videocassettes

were used to expand the magazine market. Magazines also used the cable television medium as brand extensions, producing instructional tapes and television shows designed specifically for the magazine's audience (Knoll, 1984; Pool, 1983; Learner, 1982).

But the positive effect of cable television was felt beyond the shows and advertisements produced by specific magazines. Samir Husni, a journalism professor at the University of Mississippi, and a magazine industry consultant explained the continued growth of niche publications in this way: "If I watch mud wrestling on ESPN and want to see more, I get a magazine. TV's fueling it all" (Anthony, 1998). But this explanation is not necessarily a new one. The idea of specialized television promoting increased magazine readership was suggested as early as 1965 by Wolseley: "... documentary television as well as some regular programming can move viewers to read specialized magazines as they search for more information on the subject of deep interest" (Wolseley, 1965, p. 52).

So in effect, these new media have helped increase the number of magazines by increasing an important resource: the number of people interested in a specific hobby or subject, and the degree to which they want that information. For example, in recent years, we have seen the launches of a variety of new cable sports networks such as ESPN2, The Golf Channel, a sports history channel, Speed Vision, a network of regional sports channels under Fox and more. Yet 1998 alone saw the launch of more than 122 new consumer sports magazines, with the cable network ESPN launching its own print publication to compete with *Sports Illustrated* (Shapiro, 1999). Then in 1999, the sports magazine category led again in the number of new launches (M.P.A., 2001a).

This same idea of cross-pollination can also be applied to video games. Beginning with the introduction of *Pong* in 1972 (Project, 2001) video games have not relied on advertising but only competed with magazines for consumer time. But the increased interest created by these new games motivated potential buyers for a whole new category of magazines.

> If you're a 12-year-old boy, you're totally psyched for the new 64-bit Nintendo gaming console to hit the market in September. If you're a parent, you can't wait until the price drops from $249.95 to under $200 hopefully by Christmas. If you're the publisher of a gaming magazine, you're counting on these events to boost your business. (Sucov, 1996, p. 23)

> In 1980, (S.R.D.S., 1980) this was essentially a category that didn't exist. Today with the number of different video game consoles and the popularity of many of the same games on the PC, entertainment gaming magazines are integral to the portfolio of some of the major players in the magazine industry (Sucov, 1996). Some of these titles have circulations in the 400,000 range. A number of gaming magazines also include game demos on CDs with their magazines (Nelson, 1997).

Computers

Computers first appeared in their mainframe form in the 1960s and early '70s and provided an efficiency for magazines to reduce costs and improve production quality via electronic typesetting and pre-production. As the personal computer became popular in the early 1980s, they were also an important part of magazines increasing production quality and reducing costs. No longer did magazines have to hire typesetters; writers and editors did the typesetting while they wrote

and edited. Furthermore, the eventual cost efficiencies provided by the desktop publishing revolution enabled publishers to launch more magazines in a variety of formats than ever before.

In much the same way film provided fodder for its fans, the subject of computers provided numerous opportunities for magazine launches. This analogy was not lost on business writers in the early 1980s:

> In the Great Depression, Americans forgot their troubles and found their comfort at the movies. A batch of movie magazines soon sprang up to chronicle movie idols. Now a new star is commanding publishers' attention. It's not a platinum-blonde sex symbol or a Gable clone. Hardly. It's a machine, the IBM Personal Computer. At last count there were half a dozen magazines devoted solely to Big Blue's offering. (Benoit, 1983, p. 93)

Americans purchased 415,000 PCs for home and business use in 1980 (N.Y. Times, 1983, Nov. 9). Magazine consultants described the rush to publish new computer titles as "incredible gold strikes" with entrepreneurs hitting the big time with relatively little investment (Klingel, 1983, p. 64). In early 1980 there were about 24 computer magazines. This increased to 33 by the end of the year. In 1981 there were 11 new launches, followed by 25 in 1982 and at least another 40 in 1983 (Klingel, 1983). That same year, a *New York Times* article put the total number of computer titles at more than 200, not counting the new media attempts of magazines being published on floppy disks (N.Y. Times, 1983, Nov. 9). Jay Walker, publisher of the Folio 400, the magazine industry's answer to the Fortune 500, said, "This is unprecedented in the history of magazine publishing" (N.Y. Times, 1983, Nov. 9, p. D1).

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For every new computer or operating system, software category, and specific software applications introduced in the 1980s, there seemed to be several new magazines launched (Business Week, 1983). For example, when IBM debuted its PCjr home computer in 1983, there were at least three magazines aimed at end users (N.Y. Times, 1983, Nov. 9). Note the names of these magazines that were playing off of the Apple brand name at the time: *Apple Orchard, inCider, Nibble* and *Peelings.* Most appropriately, reporters used the term "niche" to describe the situation (Benoit, 1983; Klingel, 1983; N.Y. Times, 1983, Nov. 9). These magazines succeeded and failed on the success or failure of the systems or software. In some instances the magazines outlasted the popularity and manufacturing of the particular PC brand or model (Wilson, 1994).

In one article, a successful publisher compared the explosion of the PC to the explosion in popularity of the television in the 1950s. But the reporter writing the story identified one insightful difference: "Television inspired a torrent of words but only one big magazine" (Benoit, 1983, p. 94). Without the direct competition for advertising dollars, the result of the PC explosion was instead a plethora of magazines directed at specific segments of the PC market — again, a whole new magazine category was created.

In addition to the increasing popularity of computers by consumers — "magazines are livelier and easier to read than technical manuals" (Benoit, 1983, p. 94) — another reason was the necessity for new companies and products to build brand recognition in a market where none existed. "When new brands are competing to establish brand identities, ... they spend an abnormally high level on advertising... the advertisers won't, probably can't maintain this level of advertising forever

(Klingel, 1983, p. 68). (This same scenario and advertising windfall would play out again with the Internet boom in the late 1990s.) The boom eventually ended and a shakeout took place for both PC manufacturers and publishers as advertising slowed and reader interest lagged behind the number of magazines (Tchong, 1985; Moran, 1984; Klingel, 1983).

Another benefit from computer magazines was their experimenting with new media in the early 1980s: delivering programs, text and advertising on disk to their readers. "Because all of the readers have computers, the medium can be different. You can distribute information on diskette as well as paper. They're going to advance publishing, getting it away from paper," said David Bunnell, founder of *Personal Computing* and *PC* magazines (Benoit, 1983, p. 94). "It will not be *the* trend, but it will be a trend," said *PC Disk* Publisher Andre Van Hattum (N.Y. Times, 1983, Nov. 9, p. D7).

Computer, technology and new media magazines are still a major category today. Many magazines include CD ROM disks as promotional tools and to enhance single copy newsstand sales. According to the *National Directory of Magazines,* the computer/automation magazine category was the fourth leading category, growing from 338 to 605 titles between the years 1988–1998 (National Directory of Magazines, 1999). And *Samir Husni's Guide to New Consumer Magazines* lists the computer category as the fifth fastest-growing category in 1999 with 16 new launches (Husni, 1999). These categories, of course, include new media and Internet-oriented magazines.

The Internet Threat

So in its initial form, the computer provided many benefits — both direct and indirect — to the magazine industry. One 1997 study reported

that computer use was associated with an increase in the use of print, not a decrease. However most of these positive correlations were explained away by the fact that people of higher socioeconomic status are in general more likely users of print media (Robinson & Godbey, 1997). Furthermore, the study was conducted before the days of monthly unlimited access plans now offered by America Online and virtually all other Internet service providers.

In this new millennium, the centuries-old magazine industry is faced with the World Wide Web, a new mass communications medium that is also interpersonal in nature, but offers many of the benefits provided by print, radio, and television. It is also competing along two dimensions essential to magazines: consumer time *and* advertising revenues. At least one Internet publisher predicts a "tectonic shift that happens once a generation, and the shift of old brand to new is painful and usually fateful to old brands" (Marlatt, 1999, p. 1). A 1998 report by Forrester Research noted in this same article reported that "advertisers will increasingly migrate to online business-to-business sites, and that trade publishers are lagging behind web start-ups" (p. 1). An article in *Harvard Business Review* also predicts a major shift in the way business is conducted and information is shared.

A fundamental shift in the economics of information is underway — a shift that is less about any specific new technology than about the fact that a new behavior is reaching critical mass. Millions of people at home and at work are communicating electronically using universal, open standards. This explosion and connectivity is the latest — and, for business strategists, the most

important — wave in the information revolution. (Evans & Wurster, 1997, p. 70)

Advertisers, both local and national, are now spending significant dollars on the Internet. The Internet Advertising Bureau (IAB), which started tracking U.S. Internet ad spending in 1996, reports nearly $2 billion in advertising revenue during the third quarter of 2000 alone, an increase of 63% over the third quarter of 1999. This occurred in a category of advertising that didn't exist six years ago. Said Rich LeFurgy, chairman of the IAB:

> There is no doubt that traditional advertisers are increasing their online spending, as the $6 billion year-to-date attests. With publishers offering a variety of new and innovative ad formats these advertisers are now transitioning their objectives. Increasingly aware of the power of the medium for branding and direct marketing, these savvy advertisers are no longer looking for the most traffic, rather, they are seeking different ways and new creative formats which publishers are offering, to build their brands (IAB, 2001).

It's not just advertising dollars that are shifting. Consumer time is shifting as well. With U.S. Internet penetration at 60%, 63 million Americans are averaging nearly 3 hours per week surfing the Web, staying an average of about one minute per page (Netratings, 2001b).

Even with the exponential growth the Internet is experiencing, it is certainly not a bad time for the magazine publishing industry. There appears to be no slowing of the trend of increasing number and specialization of magazine titles. 5,200 consumer magazines were distributed nationally in 1998, more than double the 2,500 that were

distributed in 1985 (Anthony, 1998). There were more new magazine launches than ever before — a total of 1,076 new consumer magazines in 1998 alone. Says Samir Husni, "I started tracking magazine launches 21 years ago, and I have never seen a year like 1998, complete with a record number of new titles. A nonstop force of new magazines were launched throughout the year, even in the doldrums of December when the number of new titles was more than double the number of launches the previous December" (Shapiro, 1999, p. 1).

The new and old media continue to play an important part of this growth: 58 new computer magazines, 23 new entertainment and performing arts magazines, 125 new media personality magazines, the list goes on and on (Shapiro, 1999). Again, in 1999 there was an increase in the number of magazine launches, although not quite as robust as 1998: 354 in 46 categories (Husni, 1999). According to Husni, the Internet is driving increased consumer interest the same way cable television did:

> The Internet and cable television have driven a demand for more information on more obscure things. So, as niche marketing is carried further, magazines become "more human." While TV provides viewership to feed the readership, the Internet — where niche marketing is far easier because distribution is cheap — is feeding a Balkanization of interests. And amateur 'zines once almost guerrilla publications, are now entering the mainstream as desktop publishing becomes easier and the number of national distributors increases. (Anthony, 1998, p. 1)

The question remains, however, can this growth and consumer interest be sustained with the increasing penetration of Internet

households (Netratings, 2001c), growing carrier bandwidth (Strategis Group, 2001), and quality of Internet Web sites? As outlined earlier, it was more than 20 years after television's advent before the full impact of television hit the mass-market consumer magazines in the1960s. One recent study conducted by Starcom, the media buying unit of Leo Burnett Co., blames the Internet for an apparent sharp fall-off in magazine readership.

> Top magazines lost 61 million readers, ages 18 to 49, between fall 1997 and fall 1998... the study blames the decline on reader migration to the Internet and predicts the effects will be "real and lasting."... 56 titles gained 18 million impressions, but 144 magazines lost 79 million impressions. (Staff, 1999, p. 1)

Publishers argue that the report mixed apples and oranges. "Readership may have declined for the top 50 magazines, but the audience has simply shifted to the incredible number of hot new magazines that started. The real trend ... is that magazines are being created for much more targeted segments" (Staff, 1999, p. 1). Further defending the position of print publishers, there has also been some question for a number of years as to the stability and consistency of year-to-year, industry-wide circulation figures (Staff, 1996).

The trend suggested by the Starcom study continued in 1999 with the Top 25 ABC audited magazines *losing* circulation while the remainder of the Top 100 showing a slight *gain,* resulting in a net increase of 1.3% (M.P.A., 2000a).

This may be an indication of another level of increased specialization by the magazine industry: the relatively general magazines of today lose circulation while the even more specialized niche magazines

gain. Just as the general interest mass market magazines lost consumers and advertisers to television in the 1950s and 1960s, today's relatively generalized special-interest publications (large circulation) are losing readers while an increasing number of even more specialized magazines are being launched. Today there are more than 300 ABC-audited magazines with circulations of less than 250,000, while there are fewer than 100 with circulations greater than one million. And the number of specialized titles keeps growing. Standard Rate and Data figures show the number of consumer magazines increasing from 1,795 in 1998 to 2,520 in 1999 (M.P.A., 2000b). These figures certainly support the idea of a complementary effect, where other media increase the overall market size for audience interest in particular magazines. History may be repeating itself in that *today's* general interest magazines are losing circulation, while niche magazines are gaining within even more specialized markets.

Conclusion

The purpose of this historical overview was two-fold. First, it provides perspective for the study at hand. When a new medium arrives in the marketplace with its accompanying bells and whistles some observers (usually proponents of the new medium) tend to ring death knells for existing media. While specific types and segments have and will continue to be negatively affected by new media, as a whole, and over a lengthy period, old media have found ways to survive in the presence of new media. Even with all the excitement generated by the explosive growth of the Internet and its exciting capabilities, history shows us that old media continue to survive and prosper — somehow. But there are serious lessons to be learned as well. If the general interest magazines in

the 1960s had reacted earlier and differently to the threat from television, perhaps their downfall would not have been so great.

The second major idea suggested in this chapter is the concept that new media can certainly displace existing media (as with television and the general interest magazines), but it can also have a complementary effect as well (computers, for example). The overall purpose of this study is to address the question of whether, in the long run for readers, the Web has the capability to displace or complement traditional magazines.

With this displacement vs. complementary idea in mind — based on an historical perspective — we are now prepared to examine the literature surrounding niche theory and media gratifications. An explication of the niche theory, uses and gratifications methodology and the strengths and weakness of magazine and Internet use studies will be followed by a presentation of the research questions and hypotheses at the end of the Chapter 3.

CHAPTER 3

Review of the Literature

Introduction

There are only 24 hours in every day. Consumers have a relatively finite amount of time for information or entertainment media. In July of 2000, Internet usage reached critical mass with 52% of the population having home access and 32% having surfed the Web that month (Netratings, 2000a). By early 2001, household penetration had reached 60% (Netratings, 2001c), broadband access was "soaring" (Netratings, 2001a) and average Internet usage had crossed the 10-hour-a-month mark for the first time — a 23% increase over the previous year (Netratings, 2000b). And these figures apparently don't include the accessibility of the Internet in the workplace.

When compared to the average number of hours Americans spend watching television, 10 hours of Internet usage over an entire month may not seem substantial, but because there are only 24 hours in a day, that diversion and information-seeking time has to come from somewhere. And there is evidence that it may be coming from time originally spent reading newspapers, magazines, watching television, and even sleeping (Stempel et al., 2000; FIND/SVP, 1997). The point being is that 10-plus hours of average monthly use is a significant threat by a new medium towards existing media.

The Leo Burnett study cited in the previous chapter (Staff, 1999) suggesting the Internet was the cause for a reduction in magazine readership is supported by the findings of the 1997 American Internet Survey. According to this random telephone survey of 1000 World Wide Web users, "traditional media continue to lose timeshare to the Internet"

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(FIND/SVP, 1997). Sixteen percent of current adult Internet users in 1997 said their use of print magazines had declined as result of using the Internet, compared to 13 percent in 1995. Other studies have produced similar results where online users are reading less print such as newspapers and news magazines (Kayany & Yelsma, 2000; Stempel et al., 2000).

However, there is also some evidence that for habitual print users, the Internet is a supplementary source of information not one that replaces conventional print use. According to a survey conducted by The Pew Research Center For The People & The Press...

> The online population is more likely to read the newspaper daily than the offline public. But this is not an apples-to-apples comparison because Internet users tend to be more interested in the news than non-users... The survey finds other indications supporting the idea that using the Internet may have a more negative impact on news viewing than news reading. (1999, p. 5)

However, it should be noted that the survey did not directly examine magazine use, but was more interested in conventional newspaper usage. But as the socioeconomic demographic moves downward towards the middle-class and beyond, the likelihood of the Internet replacing, as opposed to supplementing, conventional print use may be more likely. Some of the other findings presented in the Pew Research Center study tend to support this, wherein more recent adopters of the Internet are less likely to be conventional print users.

There seems to be mixed messages at this point in time between the Internet displacing magazines vs. the Internet complementing magazines. There is evidence that the magazine industry is thriving with

so many new magazines being launched, but at the same time there is some evidence that magazines in general are losing audience to the Internet. Are magazines piling up around house unread due to increased World Wide Web use? How are uses of World Wide Web sites and magazines similar? How are they different?

With this problem and the perspective of history in mind, this literature review examines the theoretical framework used to study the question as to what degree the Web might displace traditional print magazines. An overview of niche theory is provided, followed by an explication of its concepts and constructs. Then, the uses and gratifications perspective is touched on related to measuring the potential for audience attention, which is what is being compared in this study. More specifically, these comprise media gratifications and a construct related to media utility — gratification opportunities. Along the way, niche studies as well as gratifications research — especially those pertaining to magazines and/or the Internet — are presented as examples and to provide further understanding of the variables at hand. Then, based on this literature review the research questions and hypotheses are presented at the end of the chapter.

The Theory of the Niche

The theory of the niche is a population ecology model used to examine "the ways in which biological organisms adapted themselves to their environments. The term 'population ecology' was adopted to recognize the focus on adaptation by collective of organisms rather than by individuals" (Lambkin, 1990, p. 157). Adaptation refers to how well a particular population of organisms changes its eating or other habits in

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order to survive the introduction of a new species into an environment with fixed resources. As explained by Lambkin:

> Each stage in the sequence is marked by an invasion of a new species or an association of species, the series culminating in a climax stage in which the dominant species appears. The theory of natural selection (Darwin, 1859) provides the mechanism for explaining how the dominant species is chosen and how a long-term equilibrium is achieved. (p. 158)

With the historical overview outlined earlier in mind, one can start to see the analogy: each introduction and penetration of new media represents the invasion of a new species.

While there is some debate as to the degree and importance of competition in natural settings, when two similar species compete over fixed resources, there are four possible outcomes: 1) species A goes extinct; 2) species B goes extinct; 3) either A or B goes extinct depending on the original conditions, or finally, 4) they coexist (Stiling, 1999). The competitive exclusion principle (Keddy, 1989; Hardin, 1960) posits that complete competitors cannot coexist on finite resources. So when seemingly similar species do coexist it is because one species (or perhaps both) modifies its behavior to becomes less similar — through how it uses resources, or adaptive behavior.

Included in niche theory are a number of mathematical formulae used to measure and compare the so-called width of the resources a population utilizes to survive — the level of specialism or generalism of its diet, for instance. These measures help researchers determine if adaptation has occurred as well as estimate the potential for one species going extinct.

While the capability to adapt in nature is due to chance as Darwin suggests, human organizations adapt to competitive and environmental forces through collective cognitive thought processes as well as chance. As applied to the study of human organizations, the use of niche theory goes beyond analogy. Because niche theory measures the relative degree of competition and competitive advantage of one species or population over another, and not actual biological functions, it can be applied to other situations in a theoretically rigorous manner.

While the idea of applying population ecology models to the study of human collectives has been around for some time (Campbell, 1969), theorists eventually began adapting these models more specifically to the study of human organizations (Aldrich, 1979; Hannan & Freeman, 1977). Principles of competition and coexistence have been used outside the realm of biology in fields ranging from geography to psychology, from archeology to economics (Hawley, 1969). Dimmick highlights niche theory's application to non-biological fields in this way:

> The theory of the niche is abstract and general. It is not "about" biology; its substance is a set of concepts and propositions concerning competition and coexistence. As such, it is not exclusively a biological theory but a theory formulated by bioecologists to describe and explain competition and coexistence ... concepts and measures are applied directly, not in analogic fashion but as a theory of competition per se. (Dimmick & Rothenbuhler, 1984, p. 107-108)

As cited earlier and later in this paper, John Dimmick and colleagues have done much of the original work of applying the models and principles of niche theory to the study of mass media. The first

published application of the theory to mass media appeared in an article titled, "The Theory of the Niche: Quantifying Competition Among Media Industries" (Dimmick & Rothenbuhler, 1984) and in a book chapter that same year (Dimmick & Rothenbuhler, 1984). Their motivation was "the lack of conceptual and empirical tools for assessing the impact of fledgling industries such as cable television or nascent industries such as videotex on the existing industries of communication" (p. 290). In addition to laying out the initial background and reasoning for niche theory, these initial articles examined how the radio medium changed its pattern of resource use — the type of advertising it sold — as the new medium of television entered the market and began taking away national advertisers.

Since that time, the effectiveness of cable television's entrance into the marketplace (Dimmick et al., 1992), the video industry (Dimmick, 1997; Albarran & Dimmick, 1993), media preferences (Dimmick, 1993), new media ventures (Dimmick & Wallschlaeger, 1986), as well as telephone and email use (Dimmick, Kline, & Stafford, 1999) have been studied. Other recent applications by other authors, building further on niche theory and its application to both new and old media, include the impact of intermedia and newspaper competition on advertising sales (Shaver & Lacy, 1999), the Web as a new marketing channel in comparison to catalogs and retail stores (Li & Kuo, 2000) and the displacement of old media by online media within the home (Kayany & Yelsma, 2000).

Concepts and Definitions

Before addressing gratifications and relating niche theory to the magazine industry, following is further explanation and definitions of some of the major concepts comprising niche theory and the study of competition in ecology. General concepts such as population and environment are outlined first, followed by specific explanations of niche width, overlap, and competitive superiority.

Population and community. From a unit of analysis standpoint, the theory of the niche does not look at individual units or organisms, but a collection of organisms called a population, guild or species. This is one central difference between niche theory and conventional economic theories of competition where the unit of analysis generally the firm.

"To the human ecologist, a population is a set of organizations that are relatively homogeneous internally yet can be distinguished when populations are compared" (Dimmick & Rothenbuhler, 1984, p. 105). For example, mass communication populations comprise different media types such as television, radio, cable television, newspapers, magazines, etc. Each of these populations is a different species living and requiring nourishment — resources — to survive. As a whole, they are considered a community of mass media types.

Environment. Environments are the setting where these populations reside and exist, a culmination of all the factors that affect an organization or population of organizations. Populations may be affected by competitive forces in the environment but also by other forces – general economic conditions, for example. The impact of a recession is not the result of a competitor; the environment changes and resources become more scarce for *all* competitors. Environments may be stable or

changing. Some marketing authors have applied the relative stability of the environment into their niche equations (Lambkin, 1990), but these concepts are beyond the scope of this initial study. What's important to realize here is that emergence of new media (as described in Chapter 2) causes changes in the overall environment in which mass media exist. Media organizations must react to environmental changes if they are going to survive. The emergence of the Web has drastically changed the environment for all existing media, including magazines.

Resource use and competition. To survive, individuals and populations must nourish themselves with specific resources. Resource use is how mass media survive. For example, the resources used by magazines include advertising dollars, subscription revenues, single copy sales, etc. Subscription and single copy revenues also represent consumer time or audience attention. And without audience attention, magazines would not be able to sell advertising.

In media niche studies, some of the dimensions of resource use examined include advertising, consumer time and consumer spending, gratifications, gratifications opportunities (Dimmick et al., 1999). As one can see from the marketplace, different populations often require some of the same resources, such as advertising revenues and audience attention. And because resources are relatively finite, populations must compete – collectively and individually for their use. The more similar these resources, the more populations compete.

"Competition ... refers to the indirect effect of the use of resources by one population on the availability of resources to other forms: a resource consumed by one form is unavailable to others" (Dimmick & Rothenbuhler, 1984, p. 107). This concept assumes that resources are

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limited. If resources were automatically available when needed, there would be no competition. In terms of monetary spending, the Principle of Relative Constancy (McCombs, 1972; McCombs & Eyal, 1981) posits that the amount of money spent by advertisers and consumers on mass media is determined by the overall state of the economy. This relationship has remained relatively consistent throughout this century. (For recent critiques of the PRC and alternative explanations see Dimmick (1997) and Lacy & Noh (1997).)

Media time for audience attention can be considered relatively finite as well. There are only 24 hours per day, no more, no less. Individuals must choose with which media they spend their time. And while shifts between and within obligatory and free time activities have been identified (Robinson, 1981; Jacobs & Gerson, 2001), leisure time is still arguably a relatively finite resource:

> For most of us, the amount of time available for the consumption of various types of media is limited.... Consequently, when a new media activity is introduced into our scheduled lives, we may expect a corresponding reduction in the time spent with other media activities and/or non-media tasks. (Kayany & Yelsma, 2000, p. 216)

Superiority and displacement. If one population is superior to another in obtaining resources, it may drive another population to extinction or force the population to change or adapt its behavior, thus reducing the level of competition and ensuring survival. This is known as competitive displacement. A variety of populations are competing for the resources within an environment as outlined above.

In terms of Internet Web site and magazine use, these two mediums are competing for audience attention (time), advertising dollars, etc. Due to its inherit characteristics and capabilities, as well as content, one medium may display competitive superiority over the other in satisfying specific gratifications when consumers make decisions about their time. In other words, one medium may be "better" or more efficient in filling a need than another. (A more complete explanation of gratifications will be provided in the next section when the measurement model is discussed.) Dimmick has modified ecological mathematical calculations of competitive superiority to make them appropriate for the media research data (Dimmick et al., 1999).

While "the argument that underlies the displacement thesis is logical ... research findings have not consistently supported this model" (Kayany & Yelsma, 2000, p. 216). Some studies have supported a symmetrical relationship (increase-decrease). As the use of one new medium increases, another decreases. Still other studies have supported a complementary relationship (increase-increase), while still others have found no relationship at all between new and old media. For an overview of these studies see Kayany and Yelsma (2000). One can also see a pattern of discrepancies in the historical overview of magazines and new media presented in Chapter 2.

One mediating variable that seems to help in explaining these discrepancies is the concept of functional equivalence. In general, over the century, displacement occurred between new and old media when there were at least two dimensions of functional equivalence in competition. This is related to how truly similar two populations really are. Competing solely for audience attention does not create threatening

competition, but competing for audience attention *and* advertising dollars in a similar way does. This leads to the concept of niche.

<u>Niche breadth.</u> Niche breadth refers to the relationship of a population to its environment — "where it sits" in relation to others so to speak. Dimmick and Rothenbuler (1984) state that "the function or role of the form or population within the community is described as its niche" (p. 106). Niche breadth, or width, comprises the number or amount of different resources that a population utilizes. A population with a wide niche nourishes is itself from a wider variety of resources categories. For example, the feature film industry draws its income primarily from one source: consumer sales (in its various forms). So as a population, film occupies a narrower niche — is more of a "specialist" — than magazines. Magazines derive income from consumer sales *and* advertising sales. The same idea could be applied to newspapers, which use national, regional and local advertising — a wider niche along the dimension of advertising — as opposed to national magazines which may only sell to national accounts — a narrower niche.

Populations utilizing narrower niche breadths are called "specialists" while those utilizing more categories along a specific dimension, or a wider niche breadth, are called "generalists." In other words, the specialist requires more specific resources to survive, while the generalist nourishes itself with a wider variety. In most niche studies, niche breadth is applied in examining one or two of the macro-dimensions mentioned earlier such as advertising, consumer time or gratifications.

The actual niche breadth of a particular medium is calculated through a mathematical formula, as are niche overlap and competitive

superiority. These calculations will be presented in the following chapter when the definitions of this study are operationalized.

Niche overlap. This defines "the degree to which two populations depend on the same resources" (Dimmick & Rothenbuhler, 1984, p. 106). In the media world, different media may rely on the same resource. For example, magazines, newspapers, television and now the Internet compete for national advertising dollars for major brand names. These different niches or media have a certain degree of niche overlap. In terms of fulfilling use gratifications, or how consumers might spend their time, the Internet may be overlapping with television broadcast news and radio for how consumers get immediate news on big events – functional equivalence.

The degree to which these needs are attempted to be fulfilled, and fulfilled, by these different media is called niche overlap. And through the mathematical niche formula, the relative overlap between two media can be calculated and compared. "High overlap indicates that two media are substitutes … whereas low overlap indicates that different needs are being served and that a state of complementarity exist between the two media" (Dimmick et al., 1999, p. 6). Again, the formula for niche overlap will be presented later when definitions are operationalized. Higher overlap indicates a higher level of competition between two populations.

In sum, the theory of the niche can be used to explain how new media affect the growth or stagnation of existing media. It can also be used to make general predictions about the future. Again, it should be noted that applied to mass media, the theory of the niche is an actual theory featuring explanatory calculations, not some sort of analogy.

Niche and Gratifications

One competitive dimension that has received recent attention is how new media fulfill the same gratifications as existing media – the idea of how functionally equivalent two media are, and in what areas might one medium be superior to the other (Dimmick et al., 1999; Kayany & Yelsma, 2000; Li & Kuo, 2000). The type, degree and overlap of gratifications between magazine and Web use is the subject of this study. Therefore, it will be useful at this point to briefly touch on the uses and gratifications perspective and address some of the studies that have examined the uses and gratifications of magazines.

The uses and gratifications approach (Blumler & Katz, 1974) to the study of media comprises a large body of work that is long-standing and well documented (McQuail, 1984; Palmgreen, 1984). This perspective has also been used increasingly in studying Internet use alone as well as its effect on traditional media. Published papers comprise studies about and among commercial Web sites users (Eighmey & McCord, 1998; Eighmey, 1997), business-personal use (Korgaonkar & Wolin, 1999), computer utility and multimedia (Perse & Dunn, 1998), college students (Charney & Greenberg, 1999) and teens (LaFerle, Edwards, & Lee, 2000).

"At the core of uses and gratifications theory lies the assumption that audience members actively seek out the mass media to satisfy individual needs" (Infante, Rancer, & Womack, 1993, p. 406). Other core assumptions include that the audience uses media to fill expectations, that the audience selects media and its content to satisfy needs, and that audience members are aware and capable of stating their motives and reasons for selecting specific media (Infante et al., 1993).

Within the framework of niche theory, the idea of gratification is primarily utilized as a measurement technique to compare one medium to another, as opposed to explaining the use of one medium. In other words, the theory of the niche is primarily used to explain niche width, breadth and overlap, while uses and gratifications is used to provide the initial data for these mathematical calculations. One of the criticisms levied at uses and gratifications has been that it is "nothing more than a data-collecting strategy" (Severin & Tankard, 1979, p. 274). But for niche studies, it *is* a data collecting strategy *within* the framework of an entirely different theory.

Traditional gratifications sought and obtained are attributed to the individual because they derive from his or her desire (conscious or unconscious) to fill some predetermined need. Some of the original needs put forth by McQuail, Blumler and Brown (1972) include diversion, personal relationships, personal identity and surveillance. These and other relatively similar types of needs have been identified as factors in media use studies relating to all of the major mass media.

Another basic assumption of the theory is that, "In the mass communication process much initiative in linking need gratification and media choice lies with the audience member" (Blumler & Katz, 1974, p. 21). This assumption has been supported in numerous studies where gratifications play a significant role in media choice. (See Palmgreen, Wenner & Rosengren (1985) and Katz, Gurevitch & Haas (1973) for some early examples.) Some media are more efficient than others in fulfilling specific gratifications at certain times and places, each offering a unique combination of content, attributes, exposure situations (Katz, Blumler, & Gurevitch, 1974). "The general conclusion from uses and gratifications

research is that gratifications sought motivate the use of a particular medium" (Dimmick, Sikand, & Patterson, 1994, p. 643). The empirical presence of this connection between gratifications and media choice supports the validity and reliability of using gratification measures as an instrument to gather data to use in niche studies that compare media.

For uses and gratification studies, it is recommended that statements and measures be created through qualitative pre-surveys that ask individuals why they use certain media (Blumler, 1985). Then in the main study, these statements are factor analyzed to create dimensions of use. While this seemed to be the case earlier in gratifications research, one weakness in some of the recent Internet studies mentioned above is that gratification statements from earlier, non-new media studies were simply recycled or modified, or simply created from scratch.

In some cases, logical use themes were created from other new media research. No one has really gone back to step one in the process, gathering original Internet use statements. For that matter, traditional use statements and dimensions for conventional media may have changed as new media have altered the landscape. Dimmick suggests that because there is no universal set of domains that cross all media, pilot studies should be conducted to identify new media gratifications (Dimmick et al., 2000).

Gratification Opportunities

In 1994 Dimmick & Albarran introduced a theoretical construct — a previously unidentified and somewhat different gratification dimension called "gratification opportunities" — that was apparently the result of individuals having to differentiate between new media. As they explain,

Gratification opportunities is defined as the perceived attributes of a medium related to time use and expanded choice of content. A medium which offers more of a given content type more often provides a greater array of gratification opportunities to the audience. To date, most studies have focused on gratifications sought and obtained from the media to satisfy different needs such as relaxation or to pass the time. Gratifications sought and obtained differ from gratification opportunities in that they reflect attributes of individuals rather than attributes of a medium. (p. 224)

A brief overview of the most recent published niche study by Dimmick, Kline & Stafford (2000), which compares the niches of email and the telephone, serves to demonstrate the conceptual difference between gratifications and gratification opportunities. It also resembles the basic theoretical application of niche theory to the study of magazine vs. Web use as presented in this paper.

Using responses to a random telephone survey of 309 residents of Columbus, Ohio, the authors measured the niche width and niche overlap of email and the telephone use, along with a measure of competitive superiority. The gratification and gratification opportunity statements came from a qualitative pre-survey about email use; many of the statements were similar to those found in previous telephone use studies.

The researchers hypothesized two dimensions of telephone and email use. One involved affective gratifications related to social relationship maintenance: to share ideas and opinions, send and receive personal messages, keep in touch, etc.

The other factor comprised gratification opportunities that related to the utility of the medium: communication that is quick or fast, to get the most for your money, fits people's work schedules, etc. The findings showed that while there was competition and overlap between the media, telephone's niche leaned towards a competitive advantage along the social gratification dimension, while email found its niche and was superior along the gratification opportunities dimension. In conclusion the authors stated,

> The contrast between the gratifications and gratifications opportunities provided by the phone and email define a critical difference in the gratifications niches of the two mediums which allow them to coexist. While the data clearly indicates some displacement of long distance phone calls, the data do not support the conclusion, in this population, that email in its present technological configuration will replace or exclude long distance service. (p. 15)

In terms of gratifications of magazines vs. the World Wide Web, magazines have not been included in previous research; this is a new application of this theoretical perspective that should serve to extend and amplify this theory. It will also help answer some serious issues facing the magazine industry. As Dimmick, Kline & Stafford offered: "... a new medium may or may not compete with existing media. If competition does exist then the consequence for the older media consists of exclusion, replacement, or displacement wherein the new medium takes over some of the roles played by the older media" (2000, p. 230).

<u>Niche Theory and Magazines</u>

Now that niche theory has been explained, it can be used to illustrate in general theoretical terms some of the events that took place when new media entered the magazine environment as described in Chapter 2. This will be followed by an examination of magazine and Internet gratifications pertinent to the construction of the statements used in this study. An analogy will then be presented to "paint an overall picture" of this study, prior to the presentation of the research questions and hypotheses.

In reviewing theory of the niche literature, no studies directly related to the magazine industry were found. In fact, magazines have been specifically excluded due to the unavailability of data. Dimmick and Rothenbuhler state in explaining their choices of television, radio, newspaper and billboards, included in a study that analyzed advertising trends: "Since the [magazine] categories are not comparable to the way in which advertising estimates work for the other industries, magazines and farm publications were excluded from the analysis" (1984, p. 108).

Even so, there are several trends and issues that can be explained using the framework of niche theory along with anecdotal and empirical examples. Some of these might include the magazine medium's reaction to the entry of new media in the following dimensions or areas of resource use:

<u>Subject categories.</u> Looking at the history of magazines during the century, another macro dimension that could be identified is that of subject matter. Through the review presented in Chapter 2, one can see that the medium has moved from being a specialist, relying on fewer types of subject matter categories to attract consumers, to more of a

generalist, relying on many more subject categories to attract consumers — through the publication of an increasing number of magazine titles in increasing number of categories. Thus, along the macro dimension of subject categories, the magazine industry has increased its niche breadth to compete with earlier new media such as radio and television. At the same time, new media such as cable television and the Internet have spawned increased interest in more specialized subject matters.

The concept of specialty magazines should not be confused with a "specialist" within the theory of the niche because they are quite opposite. The magazine industry as a whole has become more of a generalist as it has sought to nourish itself with income from more categories and more publications — a wider niche breadth.

Specialty magazines aren't anything new; they have been around for more than a century, but earlier circulations were relatively small (van Zuilen, 1977). But there were also very popular general interest magazines. These large circulation publications, so popular from the 1940s through the early 1970s, tended to serve one mass national audience with general entertainment and information. So in terms of the subject matter required to attract readers' and advertisers' attention, magazines have moved from being more of a specialist – serving up fewer, broader categories — to being more of a generalist with a much wider niche breadth along the dimension of subject categories.

This is evidenced through the increasing number of magazine categories and the titles within those categories. According to Husni, 5,200 consumer magazines were distributed nationally in 1998, up from just 2,500 in 1985. And the survival rate is a respectable four of 10 (Anthony, 1998). Thus, reacting to new media's entrance into the

environment — and their ability to attract resources such as national advertising and audience attention — the magazine industry has reacted from the 1970s and into the 1990s by creating thousands upon thousands of magazines to attract more consumer and advertiser attention and to fulfill a wider degree of gratifications. There also seems to be a complementary effect as well at times.

So while a number of individual members of the magazine population — the large general interest magazines — were forced into extinction, the population as a whole adapted by relying on different resources — becoming more the generalist by widening its niche breadth — through the creation of more and more magazines that fulfilled different gratifications and provided avenues for more specialized national advertisers.

With national network television, there were originally only three members of the national television population, but with the introduction of cable television the number of broadcast networks grew (Fox, UPN, etc.). The television industry as a population was widening its niche breadth in the area of subject categories as well. In response to this, the magazine industry has continued to widen its niche breadth through the creation of more and more magazine titles, thus attracting consumers to spend their time seeking more specialized gratifications.

Compared to the subject categories offered by the World Wide Web, the number of television stations and cable networks — and the shows they air — are relatively few in number. Now with the Internet, there are literally millions of members and subject categories — Web sites — of this new population that have entered the environment. If subject categories are used as a measure of niche breadth in terms of attracting

consumers (time) or the ability to provide gratifications, the Internet has a wider niche breadth overall because it is relying on an increasing number of subject matters or categories.

The number of informational Web sites dwarfs the number of magazines being published. Additionally, this new population is capable of attracting national and local advertising and fulfilling gratifications previously fulfilled by magazines. The niche breadth of this new medium, whether you're talking about sheer numbers or advertising dollars or gratifications fulfillment may be much wider than the niche breadths of existing conventional media. And the ability of the Internet to fulfill gratifications and attract national advertising is only going to increase as bandwidth and delivery speed increases. This is why the Internet is such a threat to existing media.

Advertising. While magazine advertising has not been included in previous niche studies due to data availability, there is evidence that the industry reacted to television's entrance into the environment in much the same way radio did (Dimmick & Rothenbuhler, 1984). Like radio, magazines adjusted to television's taking away national advertisers through the creation of more regional publications. While there are certainly other factors involved such as economic development and the diffusion of publishing technology, it is interesting to note that the rise in the launches of local and regional magazines roughly correlates to the increasing number of television households. The number of households with television at the beginning of each decade is presented in Figure 1 alongside the number of regional and city magazine launches during the same decade.
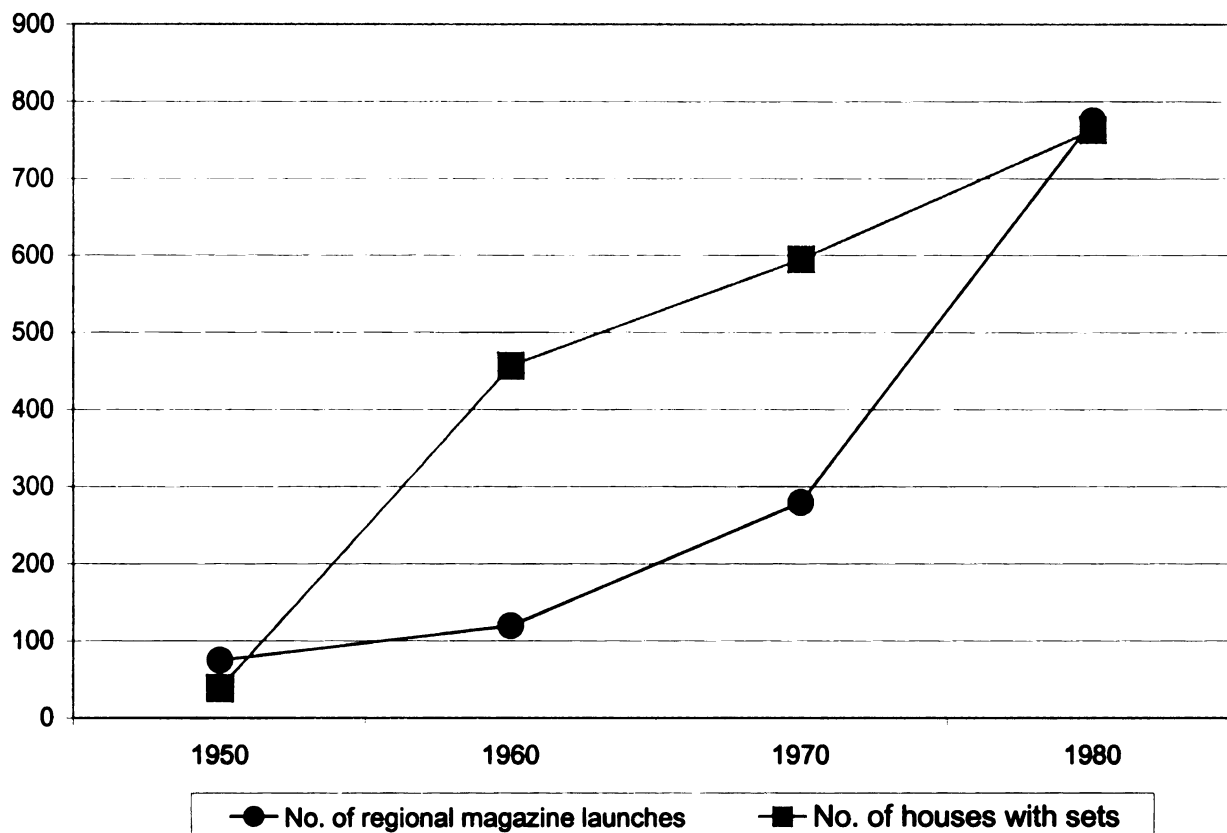
Figure 1: Regional magazine launches and U.S. television households
Source: Magazine data is from Riley & Selnow (1989); TV data is from
Salvaggio and Bryant (1989). TV households have been standardized (in
tens of thousands).

Gratifications. No obvious empirical evidence was identified in this
literature review. But as shown in Chapter 2, there are conflicting data
regarding the growth or stagnation of the magazine industry — pointing
towards a complementary or displacing relationship. The purpose of this
study is examine this issue at the audience level. We now discuss some
gratifications research on magazines and the Internet before presenting
the research questions and hypotheses.

Magazine Gratifications Research

"If print media are given more than cursory attention, it is usually the newspaper ... that receives notice" (Schmidt, 1980, p. 2) This idea is exhibited in gratifications research specific to magazines. When compared to other traditional mass media, "uses and gratifications research exclusively relevant to magazines is sparse" (Payne, J.H., & Dozier, 1988, p. 909).

As with other uses and gratifications research, earlier magazine-only studies focused on more general use: consumer and news magazines (Towers & Hartung, 1985), readership of news magazines (Towers, 1987) and trade vs. consumer magazines (Payne et al., 1988). More recent magazine-only research has been extremely specific: cancer information seekers (Johnson & Meischke, 1993) and African-American teen female readers (Duke, 2000). But compared to other major media, magazine gratification studies are relatively few and far between. Moreover, while magazines have been included in some recent cross-media and new media studies regarding functional equivalence (Stempel et al., 2000; Vincent & Basil, 1997) they have been excluded in others (Kayany & Yelsma, 2000; Perse & Dunn, 1998) or grouped together with other print media (LaFerle et al., 2000; Perse & Courtright, 1993). And even in the studies where magazines were specifically included, the researchers were often concerned with *weekly news* magazine use; typical monthly magazine research is scarcer still.

The uses and gratifications of magazines identified by some of the earlier quantitative, magazine-specific research comprise three major dimensions, along with gratification statements, much like dimensions identified in research of other media. "Repeated use of a somewhat

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standardized group of measures suggests user motivations may be reduced to three:" (Payne et al., 1988, p. 909)

Surveillance. "... can be viewed as media use with the objective of securing new information about one's environment, or confirming, reinforcing or modifying views about the environment." (Payne et al., 1988, p. 910). This dimension is reflected in gratification statements such as "Magazines help me understand what's going on" and "Magazines help me keep abreast of events."

Interaction. "Media use motivated by anticipation of interaction is expected to provide information or insights that might be called upon as grist for conversation or other social intercourse" (Payne et al., 1988, p. 910). Included in the interaction dimension are statements like, "Magazines offer interesting stories" and "Magazines offer information to pass on to others." Anticipated social interaction is the key concept with this dimension.

Diversion. is "... prompted by a need to divorce oneself from disruptive environmental stimuli, to reduce or modify cognitive or effective stimulation" (Payne, Severn and Dozier, 1988, p. 910). "Magazines help pass time" and "Magazines help me relax" are two of the statements representative of this dimension.

Magazine Dimensions Media Choice

Some correlative work has been done wherein certain gratifications were more likely to be identified by subscribers to one type of magazine compared to other types of magazines and single copy readers as opposed to subscribers. For example, Towers (1987) found that the diversion dimension predicted the use of consumer magazines and the

surveillance and interaction dimensions predicted the use of news magazines such as *Time, Newsweek* and *U.S. News and World Report.*

Payne, Severn and Dozier (1988) reported that "users of trade magazines have higher surveillance scores than users of consumer magazines" and that "diversion seeking was higher among users of consumer magazines than for users of trade publications" (p. 912). Towers and Hartung (1985) examined readers and non-readers of magazines and found that "magazine non-readers were more likely to be oriented toward local information" (p. 5). Furthermore, they reported that while newspapers and magazines share the same dimensions of surveillance, diversion and interaction, "the three dimensions for magazine emphasize different uses and gratifications statements for those concepts than did newspaper" (p. 5).

In another pre-Internet, cross media comparison, Towers (1986) examined the factor loadings and emphasis of 14 uses and gratifications statements across magazines, newspapers, television and radio. In conclusion he reported:

> Combined, these findings meant that diversion spanned all three media, supporting the cross-media perspective. But the instability of surveillance and interaction across media meant that those concepts had particular meanings for particular media, supporting the single media approach of structural research. Diversion was common across media while surveillance and interaction depended on the media under consideration. (p. 48).

Thus, while some statements within particular dimensions are consistent across media, others vary depending on the specific media. The statements that are not consistent across media comprise the uses

and gratifications that distinguish one medium from another. These differences may comprise the subject matter addressed by these media or the inherent physical and technical characteristics of the delivery medium itself – gratification opportunities.

<u>Magazine and Internet Gratifications</u>

"There is of course, no single master list of the gratifications obtained from media use; instead, multiple lists, categories and classification systems abound" (Charney & Greenberg, 1999). This is certainly evident in the recent Internet use studies identified earlier in this chapter. Prior to the creation of gratification statements for this study, one question was what gratifications identified in Internet studies are similar to those of conventional print magazines? Since there were many similarities found in the previous cross media comparison of traditional media (Towers, 1986), one would assume that there would be similarities with the Internet.

Charney and Greenberg (1999) identified eight Internet use gratification dimensions. These included Keeping Informed, Diversion-Entertainment, Peer Identity, Good Feelings, Communication, Sites & Sounds, Career and Coolness. By far the greatest factor was Keeping Informed, which explained 39% of the variance. The remaining factors each explained less than 10% of the variance.

The Keeping Informed dimension may seem most similar to the original magazine dimension of Surveillance, however, this Internet dimension of Keeping Informed included several statements such as "to get information about products or services" and "to get information to pass on to other people" that originally loaded on other factors in the magazine research by Towers — diversion and interaction.

Clearly, a general cross comparison between the Web and magazines is not easy to do because of the increased number of dimensions — eight as opposed three — and the new capabilities of interpersonal communication and interactivity provided by the Web. Of the 46 statements included in the factor analysis from the Internet study, only six or seven of the original 14 magazine uses and gratifications statements could be reasonably identified in the new Internet study. In other words, the uses and gratifications of the Internet vs. that of magazines, or the potential niche breadth and overlap as defined within the theory of the niche, are not quickly identified by comparing previously used gratifications statements. Furthermore, this Internet study had respondents rate *how often* they got on the Internet to satisfy these needs (statements), whereas the previous research collected by Towers asked respondents how much they *agreed or disagreed* with the statements. It is not known what effect this may have had on the findings and differences.

As noted, one of the weaknesses of previous magazine gratification research is the repeated use of existing measures. For example, the 14 statements utilized by Towers were taken from "research into the surveillance-diversion-personal identity triad in relation to newspaper and radio" (Towers, 1987, p. 5). Other magazine studies seem to have modified the uses and gratifications of newspapers and other media to fit the magazine study at hand. And subsequent research relied on the gratifications statements used by previous researchers. Nowhere in the literature was found definitive evidence of a qualitative pre-survey of the uses and gratifications specific to magazines, which is such an important part of the uses and gratifications methodology. If one utilizes the same

gratification statements over and over again, the same dimensions are likely to be identified. As Palmgreen warns, "researchers should not be wedded to gratification typologies that the very changes under study may have rendered incomplete, if not obsolete" (1984). As new media have entered the environment over the last two decades, the uses and gratifications of magazines may have changed. Thus any study comparing magazine and Internet uses should use both pre- and post-new media gratification statements from other studies as well as those garnered from a qualitative pre-survey.

A Niche Analogy

With niche theory and other issues related to magazine and Internet gratifications examined, it will be useful to present an analogy of the study at hand, prior to presenting the research questions and hypotheses. This study's use of niche theory terms and mathematical formulae is beyond a simple analogy, but it will still be useful to paint a picture to provide better understanding.

While it is easy to comprehend advertising revenues as a fundamental resource that magazines must compete for and consume to survive, it is more difficult to find a direct analogy for audience attention of magazines or the Internet. Yes, subscription revenues are an indirect measure of consumer time spent with a medium. But subscription revenues do not directly reflect the gratifications obtained by the consumers. (Also, one could subscribe, but not actually read.) Plus, many media products — TV, trade magazines, the Internet — do not require a subscription. Following is an analogy from nature that maintains the analogy of revenues, but also includes the concept of consumer time and attention spent with the medium:

Imagine a large, grassy meadow featuring various groups of flowers and flowering plants. The meadow represents the overall economic environment while the types of flowers or plants symbolize the various media types. Each specific population of flowers is made up of a number of individuals with similar characteristics. Thus each medium — TV, Internet, magazines, etc. — is a different population made up of individual products (stations, titles, sites) with similar characteristics.

A few major resources that are required by these plants include sunlight, water and the nutrients in the ground. These populations compete for resources as individuals, but also as groups. So, sunlight, water, etc. might represent the various types advertising revenues (local, national) and advertising categories. Lacking any one of these major resources, both individuals and groups will die off. Helpful, but not totally necessary nutrients might represent subscription revenues.

Now, how does consumer time or audience attention fit in? Well, there is one other resource required for plants and flowers to survive — pollination. Without it the population cannot reproduce and continue. One way plants are pollinated is through honeybees visiting the various flowers for nectar. They are attracted to the flowers because the nectar fulfills a need. Bees select the flowers based on their availability, the amount and quality of the nectar inside, the visual patterns present in the flowers. So, to complete the analogy of a niche study in nature, this study comprises interviewing the honeybees (consumers) about how well two populations of plants and their flowers (magazines or the Web) attract and fulfill their needs (gratifications). We are also asking about the taste of the nectar from each flower type and what they use it for

back at the hive. With this analogy in place, the research questions and hypotheses are now presented.

Research questions and hypotheses

The literature review comprising Chapters 2 and 3 included an historical overview of the effect of new media on the magazine industry, an explanation of the theory of the niche as applied to the magazine industry. It also featured magazine- and Internet-oriented gratifications research, which is used as a measurement tool in some theory of the niche studies. The purpose of Chapter 2 was to provide perspective, while Chapter 3 explicated theory and highlighted the strengths and weaknesses of previous research so the following research questions and plan could be presented.

Research questions. Based on the literature review and the theory and measurement models outlined, the following research questions were posed:

1) Are Web users reporting less magazine use after Internet adoption?

2) With immediate, diverse and interactive content available to Web users, do traditional magazine gratifications still fall into the three main factors identified in earlier literature — surveillance, diversion and interaction?

3) Relative to magazine use, what gratifications identified in recent Internet studies fall into these same three factors? What newly identified dimensions – including gratification opportunities— stand alone?

4) What is the degree of specialism or generalism — niche breadth — in total, and along any new or existing gratification dimensions?

5) As measured by the niche overlap of gratifications, what is the level of similarity perceived between print magazine and Web use in total and along the identified gratification dimensions?

6) On what gratification dimensions does Web use display competitive superiority over print magazines and vice versa? And to what degree do these superiorities point to displacement or coexistence?

Research hypotheses. Additionally, several hypotheses based on the theory, models and trends presented in the literature review are presented below.

First, actual Internet use is a critical variable in predicting whether participants will perceive the Internet to be of a greater use and value than magazines.

H1. There is a positive correlation between time spent using the Web and total Internet niche width, niche overlap and competitive superiority. Because niche overlap is an inverse measure, the positive correlation denotes a perception of decreasing competition between magazines and the Web.

Furthermore, the opposite should hold true for magazine users (who use both mediums). Heavier users of magazines should perceive benefits of magazines and appreciate the differences between the

mediums:

H2. There is a positive correlation between magazine use and total magazine niche width, niche overlap and competitive superiority.

One of the survey questions is directly related to the time spent reading magazines since becoming a Web user. Analyzed in groups of increasing and decreasing use:

H3. Increasing magazine users will perceive significantly greater magazine niche width, niche overlap and competitive superiority between the two mediums.

H4. Decreasing magazine users will perceive significantly greater Internet niche width, competitive superiority and lesser niche overlap.

Next, demographic data from a variety of studies (Pew Research Center, 1998) suggest that younger individuals are more likely to use the Internet; they have had greater exposure to this resource to fulfill specific media gratifications. And the younger one is, the more likely one will perceive the new medium of the Internet to be advantageous over conventional print magazine use. Older participants will perceive greater magazine niche breadth and lesser niche overlap between magazines and the Internet. The opposite will be the case for younger participants. Therefore, for the total score of all factors combined:

H5. There is a positive correlation between age and total magazine niche breadth, niche overlap and competitive superiority.

H6. There is a negative correlation between age and Internet breadth and competitive superiority.

Studies have also identified Internet users as being information

hungry and more likely to be newspaper readers (NAA, 1999). While this denotes a preference for information, it should also denote some preference for the tactile nature of the printed page. Therefore:

H7. Newspaper users will perceive greater total magazine niche width, niche overlap and competitive superiority than non-newspaper readers.

Finally, Internet access speed should have some type of an effect on the overall perception of the utility of the Internet. Users with faster access can visit more sites, download more files, etc. Therefore:

H8. Users with access speed greater than 56K will perceive greater Internet width and superiority, and less overlap than users with access speed of 56K or less.

Conclusion

This chapter has presented a theoretical literature review of niche theory and gratifications related to magazine and Internet use. The research questions and hypotheses were also presented. The following chapter provides the definition and operationalization of variables, along with the research methodology, used to answer the research questions and test the research hypotheses.

CHAPTER 4

Method

<u>Introduction</u>

As outlined in previous chapters, when new media enter the environment they consume resources. Traditional media are sometimes displaced. In other instances, a complementary relationship may be apparent, whereby the new media increase interest thereby increasing overall size of the marketplace for existing media. Within the framework of niche theory and media gratifications, this study examines the degree to which magazines and the World Wide Web compete for audience attention along several dimensions involving use.

This chapter explains the survey design and procedures used to answer the research questions and test the research hypotheses. A description of the variables, the setting of the study, survey instrumentation, procedures for collecting the data, and population and sample are described. The results are then presented in Chapter 5.

<u>Definition and Operationalization of Variables</u>

The main research questions will be answered through exploratory factor analysis and the results of niche width, breadth and superiority measures. These niche calculations are based on established formulae (Dimmick et al., 2000). The dimensions and data used for the formulae stem from ratings obtained on a number of gratification statements, which are described in detail later in this chapter. These gratification statements were based on a combination of traditional, pre-Internet magazine use statements, more recent Internet-oriented use statements and other statements identified in a qualitative pre-survey.

A description of the niche measures — as outlined by Dimmick

(2000) is presented first, followed by the definition of the other variables associated with the research hypotheses.

Niche breadth. In this study, niche breadth or width measures how generalized or specialized a medium is perceived to be. A high score suggests generalism, while a low score indicates specialism. The score is standardized on a 0 to 1.0 scale, so as a score nears 1.0 the greater the number of gratifications it fulfills. Niche breadth is calculated utilizing the niche formula modified by Dimmick (Dimmick et al., 2000):

Niche Breadth

$$B = \sum_{n=1}^{N} \frac{\left[\frac{\left(\sum_{k=1}^{K} GO_n \right) - Kl}{K(u - l)} \right]}{N}$$

Where:

u, l = the upper and lower bounds of a scale (5 and 1)

GO = a gratification obtained rating on a scale

N = the number of respondents using a medium

n = the first respondent

K = the number of scales on a dimension

k = the first gratification scale

Niche overlap. Niche overlap measures the relationship between one population and another in the community. It measures the degree of competition between two populations (assuming resources are finite); in

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this case the two populations are magazines and the Web. Again, the data stems from the ratings obtained on the gratification statements. Dimmick's (2000) formula for niche overlap is calculated and further defined as follows:

Niche Overlap

$$O_{i,j} = \frac{\sum\limits_{n=1}^{N} \sqrt{\dfrac{(GO_i - GO_j)^2}{K}}}{N}$$

Where:

    i, j = medium i and medium j

    GO = a gratification obtained rating on a scale for i and j

    N = the number of respondents who use both i and j

    n = the first respondent

Overlap is an inverse measure and low values indicate high similarity between the two media. The lower limit of the overlap measure is zero and indicates that the niches of the media i and j overlap completely, or the niches of the two are identical. The upper limit is u minus l and is reached when respondents rate one medium at the upper bound on all scales and the other medium at the lower bound of all scales. Niche overlap can be considered as an index of the substitutability or complementarity of two media. High overlap indicates that two media are substitutes; they serve the same needs. Lower overlap indicates the two serve different

needs and thus a state of complementarity may exist between the two (Dimmick et al., 2000).

Niche superiority. This measure suggests which of the two mediums being tested is perceived to be better or more efficient at fulfilling the specific gratifications. "A medium that obtains a significantly higher superiority score than another medium is superior in providing gratifications to the audience members" (Dimmick et al., 2000, p. 233). Dimmick's copyrighted formula for niche superiority is as follows:

Niche Superiority (©1985, J. Dimmick)

$$\text{Superiority } S_{i>j} = \frac{\sum\limits_{n=1}^{N} \sum\limits_{k=1}^{K} \left(m_{i>j} \right)}{N}$$

$$\text{Superiority } S_{j>i} = \frac{\sum\limits_{n=1}^{N} \sum\limits_{k=1}^{K} \left(m_{j>i} \right)}{N}$$

Where:

i, j = medium i and j

$m_{i>j}$ = the value of a respondent's rating for those scale items on which i is rated greater than j (the sum of the actual values)

$m_{j>i}$ = the value of a respondent's rating for those scale items on which j is rated greater than i (the sum of the actual values)

K = the number of scales on a dimension

k = the first gratification scale

N = the number of respondents who use both i and j

n = the first respondent

The scores of niche superiority are defined as arithmetic means. As a result, the differences in superiority between two means on a utility may be tested for significance using a t-test for correlated media. If the test yields a significant result, this is interpreted as superiority of one medium over another on that utility. Conversely, the absence of a significant difference indicates that neither medium is superior on that niche dimension. (Dimmick et al., 2000).

Other demographic and independent variables used in the hypotheses include:

Magazine use. This variable was defined as subscribing to or reading conventional printed magazines for consumer, special interest or business use. These could be monthly or weekly publications. This was operationalized through two questions asking how many magazines they subscribed to and how often they purchased singles copies of magazines. (See Appendix A for copy of survey.).

World Wide Web use. This comprised viewing and reading of Web pages published by organizations or individuals for consumer, special interest or business use. For the purposes of this study, WWW use did not include the use of email, chat rooms and message boards (directly interacting with other individuals or groups of individuals). This variable was operationalized through one question that asked how many hours they spent visiting Web sites in the last week.

Displacement. The concept of whether magazines were being displaced by the Web on an individual basis was operationalized through one question: "Since becoming a WWW user, has the amount of time you spend reading magazines" increased, remained the same, or decreased?

Newspaper use. Newspaper readers were considered to be a good representation of print-centric individuals. The concept was operationalized through a simple, direct dichotomous question: whether they had read a local newspaper the previous day. The variable was operationalized in this way to create a harsher line between the two groups, readers and non-readers.

Access speed. This variable was measured with one ordinal question, asking subjects the speed of their primary Internet connection. For data analysis they were grouped in two: 56K and slower, or faster than 56K.

Method

A self-report questionnaire was administered to 1250 subscribers of a monthly special interest magazine with a total U.S. circulation of 50,000. The magazine is targeted at semi-professional and professional musicians, and is owned by a major global publisher with more than 300 titles in trade and consumer categories. Based on the demographics promoted in its advertising sales kit, the magazine subscribers were predominantly male, average age of 36, with more than 60% using the Internet to access manufacturer Web sites.

Niche studies require a comparison between two mediums. Thus, the goal was to capture a group of respondents who used both magazines and the World Wide Web. While not immediately generalizable to the entire Internet population, this population is a valid selection because it is representative of typical Web users. This population will continue to grow as the Internet penetrates more and more households. Due to the requirement of the use of both mediums, this sample was also deemed more generalizable than readers of a technological or computer

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magazine. Readers of computer magazines may have been too Internet savvy, skewing the results. Thus, this population was deemed balanced enough to enable the effective execution of the survey, since it required users of both mediums. Keep in mind also, respondents were asked about their *overall* magazine and Web use, not just use related to the subject of the magazine.

The data were gathered through two separate administrations of a self-report questionnaire to two subsets of the same target group. First, 500 readers were selected at random (every nth) from a subscriber list and mailed a print version of the survey with accompanying postage-paid reply envelope. Seven hundred and fifty additional readers were invited to participate in a Web-based version of the survey via email. This group was targeted via a list of subscribers who had previously registered for interactive content on the magazine's Web site. So the first sample was a true random sample of subscribers, while the second set was a purposive sample with specific characteristics.

The survey was administered to the two subsets in this manner for several reasons: The first was to provide as high a variance as possible in Web use among respondents. While a niche study does require that participants use both mediums, a single administration of the survey over the Web to a Web-based group might skew results by attracting heavier Web users than average.

Second, a Web-based survey could create response bias due to the survey instrument itself. Participants taking the survey on the Internet might rate the Internet more favorably simply because they were taking the survey over the Internet. The additional mail administration of the survey would allow the isolation and identification of this confounding

variable if it existed. Finally, if neither sample or instrument bias could explain any potential differences in how the two sub-sets rated magazines and the Web, a newly identified gratification dimension might provide further depth in answering the research questions or explaining the results of the hypotheses.

In summary, the goal of executing the survey via two subsets of the same homogeneous group of subscribers, utilizing two different mediums to administer the survey, was to enhance the validity of the findings and allow for the possible comparisons between the groups – if any existed.

To increase the response rate among both samples, a prize was offered; all participants completing the survey were entered in a contest to win a $100 gift certificate to the store of their choice. These types of incentives increase response rate but do not result in response bias (Goetz, Tyler, & Cook, 1984; Armstrong, 1975).

In early October 2000, the mail survey was sent to the 500 subscribers followed by a reminder postcard three weeks later. The cover letter from the author was on Michigan State University School of Journalism letterhead and explained the basic purpose of the survey along with other information required by MSU's institutional review board (UCRISH). While each survey was assigned a visible tracking number, respondents were guaranteed confidentiality. In early November a second copy of the survey was sent to those who had not yet returned the survey. Copies of the reminder postcards, and second survey cover letter are available in Appendix A.

For the Web group sample, an initial invitation was sent via email in early November at the time the first reminder postcards were sent to

the mail group. Two additional reminder invitations were sent at 10-day intervals (see Appendix B). In addition to being promised confidentiality, Web users were promised that their email addresses would not be used for any purpose other than the execution of this study. To guarantee that there would not be multiple submissions from the same individual, a security feature on the program used to administer the survey was utilized which allowed only one participant or submission per email address.

Response Rate

Six foreign addresses were inadvertently included when the sample was drawn so the total mailed was 494. Eventually 63 were returned because of incorrect addresses, forwarding orders expired, etc. This bad address rate of 12.7% seemed high. The editor at the publishing company was contacted and it was determined that a large number of subscribers had recently been purchased from a competing publication that was going out of business. The new list had not been audited and bad addresses had not been purged from the list as of that date either. This explained the high bad-address rate.

155 mail surveys were returned, yielding a gross response rate of 36% based on "good" addresses. Three were returned incomplete while 13 were from non-Web users, which were excluded from analysis. (Again, keep in mind that niche studies require users of both mediums.) A response rate of 36% is consistent with current mail survey trends. However, the fact that 92% of all of the respondents were Web *and* magazine users, points to the conclusion that non-Web users were much less likely to return the survey than Web users. This makes sense since Web-users were probably more motivated to return and complete a

survey that pertained to a subject matter they were interested or involved in. If you take into account the original figures provided by the publishers — that 60% of the magazine's subscribers were Web users — then the net response rate was probably much higher.

Since the Web survey was administered over the Internet to a subset of magazine subscribers, all respondents were magazine *and* Web users. 750 were invited to participate with 233 completing the survey — a response rate of 31%. While this was not as high as the mailed survey it was deemed satisfactory compared to other the Internet; not as high as some, but higher than others. (Cook, Heath, & Thompson, 2000; Schillewaert, Langerak, & Duhamel, 1998).

<u>Survey Instrument</u>

The survey instrument comprised 50 questions in three sections. The first section measured Web, magazine and some other mass media use levels. The second section comprised evaluations of magazines and Web use on specific gratification statements. The final section asked demographic questions. The introductory page, which featured the appropriate disclosure information, also included a definition of magazine and the World Wide Web use similar to the definitions presented earlier in this chapter. At the end of the survey there was also a place for respondents to add additional qualitative comments.

The survey's main section asked the subject to rate how helpful World Wide Web sites and magazines were on 35 gratification statements with corresponding Likert scales. The statements originated from past magazine gratifications oriented research, a recent Internet uses and gratifications study, and statements obtained through a qualitative pre-survey.

More specifically, these measures comprised 13 statements from Payne, Severn & Dozier (1988); one statement from Towers (1985); nine non-redundant Internet use statements from Charney and Greenberg (1999); and 10 Internet-oriented uses statements from a pre-survey where 283 subjects were asked why they visited the Web sites of print publications.

Since this study examines the potential displacement of magazines by WWW use, it was important to use statements that were a) based on traditional magazine use; thus the statement from Payne, Severn & Dozier, and Towers, and b) included only those uses that could possibly be fulfilled by *both* mediums. So statements selected from the Internet gratifications study and pre-survey were applicable to both mediums, or were modified to become such.

For example, the statement "To look at interesting graphics and animations" from Charney and Greenberg could not be filled by a printed magazine, since magazines cannot be a cartoon animation. So this statement was modified to become "to look at interesting graphics and photos."

As outlined in the literature review, multiple underlying factors were expected, and other niche studies have highlighted the importance of utility, or gratification opportunities, when comparing two mediums. Again, it should be emphasized that the purpose of using gratification statements was not to explain use, as is the case in uses and gratification studies, but to provide a framework for the two mediums to be compared for niche calculations.

This being said, however, it was important to include as many legitimate factors as possible; thus, the inclusion of statements gathered

in a pre-survey, which will be outlined in a moment. These statements were specifically related to the utility of the two mediums.

The statements and corresponding factors (from their original studies) are presented in Table 1.

Table 1

Traditional Magazine Gratifications from Payne, Severn & Dozier (1988)

Statement	Factor
They give me information on job matters	Surveillance
They help me with my job	Surveillance
They teach me about common issues	Surveillance
They offer immediate news	Surveillance
They help me keep abreast of events	Surveillance
They help me understand what is going on	Surveillance
They help me be happy	Diversion
They help me relax	Diversion
They offer companionship	Diversion
They help improve my lifestyle	Diversion
They help pass time	Diversion
They offer interesting stories (to tell to others)	Interaction
They offer information to pass on to others	Interaction

<u>Statement From Towers</u>

Towers used most of the same statements, or very similar ones, to those above. However, Towers included an additional statement that could be filled by both Web pages and magazines that was not used by Payne, Severn & Dozier. Thus, it was appropriate for the study at hand.

Table 2

<u>Traditional Magazine Gratifications from Towers (1985)</u>

Statement	Factor
They help me find products through advertisements	Interaction

<u>Internet Statements From Charney and Greenberg</u>

A number of high-loading (above .50), non-redundant statements from the Internet uses and gratifications factors identified by Charney and Greenberg that could be applied to magazines as well as the Web were also included:

Table 3

Internet Gratifications from Charney and Greenberg (1999)

Statement	Factor
They help me get information about weather, stocks and sports.	Keeping Informed
They help me to combat boredom	Diversion
They help me to play	Diversion
They help me to gain status	Peer Identity
They help me to meet new people	Peer Identity
They help me to feel important	Good Feelings
They help me to feel good	Good Feelings
They help me to look at interesting graphics and photos	Sights & Sounds
They help me to learn about famous people	Sights & Sounds

Pre-survey Statements

The exploratory qualitative statements were gathered as part of another media use survey conducted in the spring of 1999. Prior to its posting on the Web, the pre-survey was administered to a group of 18 undergraduate college students. After completing the survey the students were asked about the ease of taking the survey and any specific questions that were difficult to understand. The students had several minor suggestions that were incorporated into the survey.

Data were collected through a convenience sample and online survey administered through a sports-oriented Web site. Section 1 comprised demographic and media use questions; section two asked how

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participants perceived Web and other conventional media, and the final section asked questions about their use of print-magazine-sponsored Web sites. In total, there were 25 questions.

For 14 days, as Web users arrived at the home page for this Web site, they were greeted with a welcome message. The message asked visitors to fill out a short questionnaire before gaining access to the full Web site. Visitors were also told that by completing the survey and providing their email address, they would be entered in a contest wherein 10 individual copies of an instructional sports videotape would be given away to 10 survey participants. The retail value of the videotape was $24.95. Visitors were also ensured that their email address would not be used for any other marketing per email list purposes. To guarantee that there would not be multiple submissions from the same individual, a security feature on the program used to administer the survey was utilized which allowed only one participant or submission per email address.

What made the administration of the survey somewhat different than some of the other typical online surveys found in the literature is that visitors were *required* to complete the survey in order to gain access to the Web site. While this reduced the number of participants, it also allowed for a better understanding of the overall percentage of participation and self-selection. Unlike an email survey posted to a newsgroup or email list, which is seen by perhaps thousands — with a few percentage points self selecting and filling out the survey — this method of administration allowed for a response rate calculation more analogous to a conventional mail survey.

The net number of responses over the 14-day period was 283. For several months prior to the administration of the survey the sports-oriented Web site was receiving approximately 845 visitors a week on average. So for a 14-day period, the Web site might have received approximately 1690 visitors. During the two-week period that the survey was administered, the total number of visitors to the site was reduced to 537. Those who completed the survey with an email address numbered 283. The remainder were those who completed the survey without including an email address.

Based on the average number of visitors, approximately 1200 individuals arriving at the site during those 14 days decided not to participate and moved on in their Web surfing activities. So a gross response rate of 31% was attained, but after removing those that did not include an email address, the net response rate was only 17%. This is not as good as a conventional mail survey but much better than the relatively self-selected few that participate in a survey posted to a newsgroup or email list.

Those taking the survey were asked three times why they visited the Web site of conventional printed magazines. More than 300 statements were gathered through these open-ended questions. The statements were scanned by the author for themes that reflected items not present in previous magazine-only statements, interactivity, and gratification opportunities that were available on both mediums. The final exploratory statements that best reflected the themes and redundancies present in the 300 gathered are presented directly below. The factor or gratification dimension is one of the research questions and will be determined through factor analysis.

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Table 4

Magazine-Internet Statements Collected in Pre-Survey

Statement	Factor
They help me because they are convenient	TBD
They help me to get information quickly	TBD
They help me to locate exactly what I'm looking for	TBD
They help me follow up and get in-depth information	TBD
They help me to contact authors and editors	TBD
They help me locate past and future articles	TBD
They help me because they are economical	TBD
They help me to express my opinion	TBD
They help me by being readily accessible	TBD
They help me to make buying decisions	TBD

In sum, the purpose of utilizing three different sources was to: a) establish a baseline with pre-Internet, magazine-oriented statements and dimensions, b) add to this by capitalizing on previous Internet research with additional statements and dimensions, and c) enhance validity by using qualitative statements which may or may not fall into existing factors. This combination of established and new statements and factors dictated the use of exploratory factor analysis, as opposed to confirmatory factor analysis, which might have been more appropriate if the exploratory statements not been used.

<u>Data analysis</u>

Data analyses for the niche measures were completed in the Excel spreadsheet program using standard functions. Individual niche scores and the remaining data were then imported into SPSS as well as Statview (by SASS) for statistical testing. Factor analysis and scale construction are traditionally presented in the methods chapter, but since several of the research questions in this study directly related to their existence and construction, factor analysis is presented in the following results chapter.

<u>Conclusion</u>

This chapter explained the survey design and procedures used to answer the research questions and test the research hypotheses. A description of the variables, the study's setting, survey instrumentation, procedures for collecting the data, and population and sample were described. The results are presented in Chapter 5.

CHAPTER 5

Results

<u>Introduction</u>

Based on niche theory and employing gratification measures, this study has sought to identify the degree to which the use of two mediums may lead to displacement or complementarity. Nearly 400 users of both mediums were surveyed and asked to rate the media on 35 gratification statements. The previous chapters have presented the statement of the problem, an historical overview, theoretical literature review and methods used to gather the data. Prior to a full discussion, this chapter presents numerical answers to the research questions and results of the statistical data analysis. The interpretation and analysis of these answers and results, along with a practical and theoretical discussion, are found in the final chapter.

<u>Description of Sample</u>

The demographics of the returned surveys yielded the following description of the sample. In this section, the characteristics of the total sample are described, noting any substantive differences between the two subsets — the mail survey subset and the Web survey subset. Any non-normal distributions are also noted. As mentioned earlier, three surveys were excluded because they were either not filled out or had extensive missing data. There were 14 that had missing data in a few places somewhere in the survey; these answers were replaced with the mean for that particular question or statement.

<u>Gender and age.</u> Eighty-nine percent of the respondents ($\underline{N}$ = 371) were male while 11% were female. This was anticipated and mirrors the demographics of the magazine's subscriber base. As reported in recent

Internet research (Cole, 2000), the ratio of male-female users is much closer to 50-50. Thus, this highlights one of the weaknesses in the potential generalizibility of the findings. However, this was one of the sacrifices made to have access to a specific group of Web users with other beneficial characteristics related to this study.

The mean age was 40 years, which may seem a bit old, but just as the gender demographic is changing, so is average age steadily growing older. The UCLA Internet reports that "contrary to conventional wisdom, Internet use is not dominated by young people. Between the age of 12 and 35, the average weekly Internet connect time increases with age" (Cole, 2000, p. 14).

While there was no significant difference in age between the two sub-samples, Web respondents were more likely to be male (93% to 7%) and mail respondents were more likely to be female (17% to 83%) ($\underline{df}$ = 1, χ^2 = 7.91, $\underline{p}$ < .01). Two possible explanations for this might be: 1) Males may be more likely to be heavier Internet users, more likely to be part of an online community. 2) Some female spouses or significant others may have seen the printed mail survey and filled it out for their male companion. Email tends to be more private than mail coming to a home. "My husband doesn't have time to fill this out so I'm going to do it for him — our magazine and web activity are similar," reflects comments appearing on at least two returned surveys.

Education and income. The other two socioeconomic indicators obtained on the survey were education and income. Overall, the respondents were well educated. Forty-three percent had some college or a two-year degree, followed by 27% with a four-year degree and 15% with a graduate degree. Ten percent had a high school diploma or GED. In

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terms of income, the subjects reflected both the leveling off of the average income of Internet user, and the general income of this type of magazine subscribers: musicians. On average, these were not the most highly paid professionals. Of the 350 respondents reporting, the median household income was "$30,001-$45,000" (21%), followed by "$45,001-$60,000" (20%), "More than $90,001 (18%), then "60,001-$75,000" (14%) and $70,001-$90,000 (14%).

Web use. Several questions regarding Web and other mass media use were asked. For the Web, the first question was how many hours they spent visiting Web sites in the last week (with a reminder not to include email or chat room board activities). Twenty-six percent spent one-two hours, followed closely by "more than five hours" (24%) and "two-three hours" (24%). Fourteen percent visited Web sites less then one hour per week and 12% estimated their use at four-five hours per week. These frequency figures are in line with the nearly three hours per week average reported recently by Nielsen//Netratings (2001b).

Between the two sample subsets, mail survey respondents tended to be lighter Web users with greater numbers than expected logging two hours of use and less. Conversely, those that took the survey via the Internet tended to be heavier users with greater numbers than expected visiting Web sites for three hours or more each week (df = 4, χ^2 = 21.86, p < .001). This difference was still significant when the cell sizes were made more similar by randomly reducing the number of Web respondents to equal the number of mail respondents. This difference was somewhat expected and was one of the reasons that the survey was administered via the mail and the Web, so there could be the widest possible degree of user types. Even so, this heavier use among the Web respondents is not

substantially greater than the nearly three hours per week average reported by Netratings. In other words, the Web respondents did not comprise a collection of outliers. Using the two samples served its purpose of providing as wide a variance as possible for this variable.

Access speed and location. A strong majority of the users (59%) had 28.8k to 56k modem connections to the Internet. This was followed by 13% with access via cable modems and 10% with T-1 or T-3 connections, and 7% with ISDN or DSL and other marginal categories (N = 369). The location of access was primarily from home 63%, followed by 34% accessing from work, 2% from school and 1% other.

Length of use. Forty-one percent of the respondents had been accessing the Web from "One to Three Years", followed by 39% at "Four to Six Years", 16% at "More Than Six Years." Only 4% were relatively new users at "Less Than a Year." This purposive sample was more experienced than the typical Web user found in the random sample of the UCLA study (Cole, 2000) cited earlier. That study comprised 21% who had been users for less than a year, compared to only 4% in this sample. Furthermore, the UCLA study showed 16% had been using the Internet for four years or more; whereas 54% of this study's sample has been accessing for more than four years. But again, due to the nature of this study, mature users (without being extreme outliers) were preferred because they would have had enough experience to more legitimately compare the two mediums. The "newness and excitement" of the Internet would have worn off, leaving them more likely to perceive the positive and negatives of the Internet and magazines.

Reasons for use. When asked how they spent their time reading and viewing World Wide Web pages, respondents answered "General

Interest/Entertainment" (24%), "Special Interest/Hobby" (36%) "Business/Work", (32%) and "School/Education" (9%).

Magazine use. Subjects subscribed to just more than three weekly or monthly printed magazines (M = 3.27, SD = 1.88). They also reported buying between one and two magazines (M = 1.36, SD = 1.39) on a single copy basis over the past month (newsstand, convenience store, etc.) Both of these seem to be slightly higher than the very vague averages reported by the Magazine Publishers of America (2000b). Frequency distributions for time spent reading magazines were as follows: "General Interest/Entertainment" (25%), "Special Interest/Hobby" (46%) "Business/Work", (25%) and "School/Education" (4%).

Television and newspaper use. For daily television use, the leading frequencies were 30% (n = 111) watching less than one hour daily, followed by 28% (n = 104) watching one hour, 18% (n = 66) watching two hours and 10% (n = 39) watching three hours. These self-reports of television viewing seem to be less than the average of four hours a day reported by the Television Advertising Bureau (2000). For newspaper use, fifty-one percent (n = 190) reported that they had "read a local newspaper yesterday" while 49% (n = 180) said no. This figure is similar to the 55% average weekday readership penetration reported by the Newspaper Association of America (2001).

With the demographic characteristics of the sample outlined, the results of the research questions and hypotheses are now presented.

Research Question One

The first research question asked whether Web use was displacing printed magazine use. Subjects were asked to estimate whether the time they spent reading magazines had decreased, increased, or remained the

same since becoming a World Wide Web user. While 17% reported that their magazine use had decreased ($\underline{n}$ = 64), nearly 13% ($\underline{n}$ = 48) reported that their magazine use had actually increased. The vast majority (70%, $\underline{n}$ = 258) estimated that their magazine use had remained the same. These data show evidence of both a displacement effect as well as a complementary relationship. (See Figure 2.)
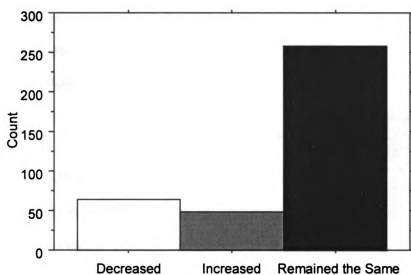
Figure 2. Levels of decreasing, increasing and static magazine use of World Wide Web users.

Research Questions Two and Three

Research question two asked whether traditional magazine gratifications still fell into the three main factors identified in earlier magazine gratifications literature — surveillance, diversion and interaction. Question three asked what Internet uses identified in more recent studies also fell into these same gratifications, and what newly identified gratification dimensions might stand alone. In sum, how had magazine gratifications changed over the years and what effect has new

media had on them? And, are there as many Internet gratifications dimensions as some research has suggested? Factor analysis and scale construction might normally be presented in the methods chapter, but because these research questions were part of the overall purpose of this study, they are presented here in the results chapter.

Beyond the general theoretical nature of these questions, their main purpose was to create gratification constructs used to calculate the niche measures for both mediums (research questions three, four and five). Because the constructs were created together the answers are presented together.

Factor analysis. The niche formulae require the gratification constructs be identified via principal axis factor analysis (Dobos & Dimmick, 1988). Some of the statements and constructs have been present in the literature long enough, and are theoretically sound enough, to support the use of confirmatory factor analysis. However, due to the exploratory nature of the newer statements, as well as the cross-media nature of this study, exploratory factor analysis was used to identify the gratification factors.

For both mediums, data for the 35 survey statements were submitted to principal axis factor analysis to see if the resulting factors reflected the same dimensions presented in the previous chapter. Like previous gratifications studies (Dimmick et al., 2000), a factor loading of at least .30 (Gorsuch, 1983) was required for a statement to be considered part of a factor. The initial default analysis (using Varimax rotation) yielded 15 factors, but only eight factors had Eigenvalues greater than 1.

Furthermore, because this study compared gratifications across two mediums, it was also required that the final factors not only load to a factor for each individual medium — but also that there be another factor with the same statements loading on the other medium. Without this a valid comparison could not be made.

The statements were factor analyzed again forcing eight factors, but still one of the factors had an Eigenvalue of less than one. Seven factors were then forced. The results of separate factor analysis for both mediums yielded seven factors for each medium, all with Eigenvalues greater than one. Twenty-five of the original statements loaded cleanly to one medium — with an equivalent factor for the other medium: Web ($p <$ .01, df = 629, Eigenvalues = 1.01 to 11.50) and magazine ($p <$ .01, df = 629, Eigenvalues = 1.13 to 9.73).

Scale construction. As stated above, creating the scales for these gratification dimensions was more difficult than typical exploratory factor analysis because statements had to load properly on a factor within a medium, but a similar equivalent factor (with the same statements) needed to be present on the other medium. There were a few statements that loaded cleanly in the factor analysis for one medium, but not in the factor analysis for the other medium. This required striking a balance between theoretical structure, factor analysis procedures and the building of scales to prepare data for the niche measurements.

If a statement loaded cleanly for one medium, but loaded on multiple factors for the other medium, this procedural rule was followed: It was included in the factor if it increased the alpha reliability of the scale on the medium where it had not loaded cleanly, ie., where it had loaded to more than one factor. Otherwise it was excluded from the

analysis. For example, the statement, "to feel good," in factor analysis as a Web statement loaded cleanly on one factor, but loaded on two factors as a magazine statement. However, including it in the magazine factor increased the alpha reliability from .71 to .76 and inclusion in the Web factor increased the alpha from .76 to .80 for the Web.

Using this procedure, four statements did not load cleanly or increase the alpha reliability of their factor scale. These were: "offer immediate news," "improve the quality of my lifestyle," "to locate past and future articles" and "to get info like weather, stocks and sports." These items were excluded from further analysis.

To summarize, 31 of the 35 survey statements were used in seven factor scales for both mediums. These dimension scales were titled: Surveillance/Keeping informed, Eye Candy, Diversion, Self-actualization, Communication/Interaction, Career/Job and Gratification opportunities. The factor loadings and alpha reliabilities of the resulting dimensions are presented in Tables 5-10. All of the alpha reliability scores were above .70, ranging from .70 to .84. An asterisk denotes statements that loaded to more than one factor, but were included in these scales because they increased reliability.

Table 5

Dimension: Surveillance/Keeping informed

Factor loadings for Web and magazine gratifications

	Web	Magazine
Offer information to pass on to others	.49	.43
Help me to understand what's going on	.50	.60
To keep abreast of events	.49	.53
To teach me about common issues	.45	.39
Offer interesting stories to pass on to others	.46	.58
To follow up and get in-depth information	.38	.32*
Alpha	.84	.82

Table 6

Dimension: Eye candy

Factor loadings for Web and magazine gratifications

	Web	Magazine
To look at photos	.63	.59
To play	.65	.42
To learn about famous people	.40	.43
To look at interesting graphics and pages	.45	.48*
Alpha	.68	.77

Table 7

Dimension: Diversion

Factor loadings for Web and magazine gratifications

	Web	Magazine
To combat boredom	.34	.57
Help me pass time	.42	.62
To relax	.49	.54
Alpha	.79	.76

Note: The Eye Candy and Diversion factors were two separate factors for Web use, but for magazines these same statements loaded on only one factor (Diversion). To increase the attenuation of comparison for the niche calculations, these factors were separated for magazine as well because the reliability of the scales remained sufficient.

Table 8

Dimension: Self-actualization

Factor loadings for Web and magazine gratifications

	Web	Magazine
Offer companionship	.57	.43
Help me to gain status	.57	.59
To be happy	.58	.51
To live out a fantasy	.54	.43
To feel important	.68	.61
To feel good	.65	.45*
Alpha	.80	.76

Table 9

Dimension: Communication/Interaction

Factor loadings for Web and magazine gratifications

	Web	Magazine
To contact authors and editors	.61	.68
To meet new people	.44*	.59
To express my opinion	.56	.68
Alpha	.72	.74

Table 10

Dimension: Career/Job

Factor loadings for Web and magazine gratifications

	Web	Magazine
To give me information on job matters	.64	.36
Help me with my job	.68	.60
To find products through advertisements	.40	.60
To make buying decisions	.49	.61
To locate exactly what I'm looking for	.33	.17*
Alpha	.70	.73

Table 11

Dimension: Gratification opportunities

Factor loadings for Web and magazine gratifications

	Web	Magazine
Because they are economical	.63	.53
By being readily accessible	.42	.61
Because they are convenient	.50	.39
To get information quickly	.29*	.43
Alpha reliability	.75	.75

In summary, this scale construction did not comprise the cleanest-loading factor analysis ever conducted — because statements had to load internally, but also had to "load" conceptually across two mediums. But when scale reliability increased with some weaker-loading statements, it was deemed safer to err on the side of inclusion. And again, it was only a matter of six statements out of 31.

A fuller meaning of these results will be discussed in the following chapter. However, in short, the answer to question two seems to be: No, the number of magazine gratification dimensions has not remained the same in the last 15 or 20 years, but has grown in number along with the increasingly specialized magazines and categories. As far as Internet gratifications (question 3), while not completely mirroring the factors suggested by Charney and Greenberg (1999), the results support the idea of more rather than less. For example, like that study, a Career/Job factor was identified here (which may just be a peculiarity of both the

samples). Furthermore, when comparing two media, the presence of a gratification opportunities dimension was confirmed.

Research Question Four

The fourth question asked what the niche breadth was along the dimensions for both magazine and Web use. Keep in mind that niche breadth is an indication of the "the degree to which a medium is capable of gratifying a relatively broad or relatively narrow spectrum of statements on a gratification dimension" (Dimmick et al., 2000, p. 4) The closer to 1.0, the more generalized a medium is, the wider the sprectrum of needs it is capable of satisfying. Using the formula identified and explained in the literature review and methods chapters, the niche breadths for magazine use and Web use for each of the seven factors are presented in Table 12. While context and meaning will be provided in the following chapter, in total, the Web (.56) has broader use potential than magazines (.44). The biggest difference was along the .

Communication/Interaction dimension where the Web scored .44, while magazines scored .16.

Table 12

Niche breadth for the Web and magazines

	Web	Magazine
Surveillance/Keeping informed	.66	.61
Eye candy	.54	.49
Diversion	.56	.58
Self-actualization	.29	.27
Communication/Interaction	.44	.16
Career/Job	.65	.52
Gratification opportunities	.79	.44
Total average niche breadth	.56	.44

Research Question Five

Using the niche overlap measure, research question five asked how similar or different print magazines and Web were perceived to be. "Overlap is an inverse measure and low values indicate high similarity in gratifications obtained from the two media, whereas high values denote dissimilarity" (Dimmick et al., 2000, p. 232). Low values denote a state of substitutability (they serve the same functions) while high values suggest that a state of complementarity exists.

Total as well individual dimension niche overlap scores are presented in Table 13. While the results will be discussed in the following chapter, overlap scores from other niche studies would suggest that an overlap score of 1.31 or less is a strong level of competition or substitutability. For example, Dimmick stated that an overlap of 1.08 indicated "moderately strong competition between e-mail and the

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telephone" (Dimmick et al., 2000, p. 238). The Self-actualization dimension shows particularly high competition with an overlap score of .75. More on this in the following chapter.

Table 13

<u>Niche overlap for the Web and magazines</u>

	Overlap
Surveillance/Keeping informed	1.18
Eye candy	1.29
Diversion	1.06
Self-actualization	.75
Communication/Interaction	1.44
Career/Job	1.53
Gratification opportunities	1.93
Total average overlap	1.31

Research Question Six

The sixth research question assessed on which gratification dimensions does Web display competitive superiority over print magazines and vice versa. The results for each of the factors and total superiority scores produced via Dimmick's formula are presented in Table 14. Because superiority is defined as an arithmetic mean, any differences can be tested for significance using a T-test for correlated groups. As highlighted by the ">" signs in the table, Web superiority was significantly greater in total, as well as on all the factors except one — diversion.

Table 14

Niche superiority values and T-tests for Web and magazines

	Web		Mag.	t	p
Surveillance/Informed	8.38	>	4.90	5.51	<.01*
Eye candy	5.34	>	3.78	3.81	<.01*
Diversion	2.93		3.11	.49	.62
Self-actualization	3.76	>	2.60	2.87	<.01*
Communication	5.67	>	0.29	20.39	<.01*
Career/Job	8.96	>	3.79	10.53	<.01*
Gratification opportunities	12.58	>	1.26	26.58	<.01*
Superiority average total	6.81	>	2.82	12.83	<.01*

Note: df = 370

<u>Hypothesis One</u>

Because gratifications sought and obtained are related to use, and the niche measures are based on these same gratifications, this hypothesis suggested that there was a positive correlation between Internet use and total Internet niche width, niche overlap and competitive superiority. The hypothesis was supported for total niche width and total competitive superiority, but not for total niche overlap.

A moderate relationship was present for two of the variables. As total Internet niche width increased, so did Web use ($\underline{r}$ = .40, $\underline{p}$ < .01), as well as Web competitive superiority ($\underline{r}$ = .29, $\underline{p}$ < .01). However, the relationship between Internet use and niche overlap was not significant ($\underline{r}$ = .05, $\underline{p}$ = .31). As shown in Table 15, this was the case for all of the factors except Communication/Interaction and Gratification Opportunities. On those two dimensions there was a significant positive relationship between use and niche overlap. Because this is an inverse measure, this denotes a decrease in their similarity as Internet use increases.

Table 15

Correlations between Internet use and Internet niche width, overlap and competitive superiority on individual gratification dimensions

	Width	Overlap	Superiority
Surveillance/Keeping informed	.37**	-.09	.25**
Eye candy	.28**	-.03	.21**
Diversion	.32**	-.08	.22**
Self-actualization	.25**	-.01	.20**
Communication/Interaction	.24**	.16**	.18**
Career/Job	.31**	.09	.15**
Gratification opportunities	.35**	.14**	.25**

Note: ** significant at <.01 level

Hypothesis Two

This hypothesis stated that there was a positive correlation between magazine use and total magazine niche width, niche overlap and magazine competitive superiority. Magazine use was measured in two different ways: subscriptions and single copy purchase. The correlation between these two use variables was very low and not significant (N = 367, r = .05, p = .29). This suggests two different types of magazine reading habits. Thus, this hypothesis was tested for both items.

Subscribing to magazines. The hypothesis was supported for total niche width (r = .15, p < .01) and competitive superiority (r = .13, p = .01), but not on niche overlap (r = -.07, p = .19). As shown in Table 16, the hypothesis was supported individually on only a few of the dimensions, primarily with magazine niche breadth.

Table 16

Correlations between magazine subscriptions and total magazine niche width, overlap and competitive superiority on gratification dimensions

	Width	Overlap	Superiority
Surveillance/Keeping informed	.22**	-.08	.10
Eye candy	.03	-.02	.11*
Diversion	.09	-.09	.08
Self-actualization	.03	-.04	.08
Communication/Interaction	.02	-.00	.03
Career/Job	.20**	-.07	.14**
Gratification opportunities	.16**	-.07	.08

Note: **<.01, *<.05

Single copy purchases. The hypothesis was supported for total magazine niche width (r = .13, p < .05), but not on overlap (r = -.04, p = .38) or magazine competitive superiority (r = -.03, p = .60). As shown in Table 17 below, the hypothesis was supported on even fewer gratification dimensions than for magazine subscriptions.

Table 17

Correlations between single copy purchases and total magazine niche width, overlap and competitive superiority on gratification dimensions

	Width	Overlap	Superiority
Surveillance/Keeping informed	.10	-.07	-.03
Eye candy	.11*	-.14**	.02
Diversion	.05	-.01	-.01
Self-actualization	.10	-.05	-.02
Communication/Interaction	.14**	.06	.01
Career/Job	.05	.00	-.02
Gratification opportunities	.10*	-.05	-.06

Note: p **<.01, *<.05

Hypothesis Three

One of the survey questions was directly related to the time spent reading magazines since becoming a Web user. Analyzed in groups of increasing and decreasing use, H3 stated that increasing magazine users would perceive significantly greater magazine niche width, greater competitive superiority and lesser niche overlap between the two mediums than decreasing magazine users. This hypothesis was fully supported. (Presented in Table 18 with the results of Hypothesis four.)

Hypothesis Four

This hypothesis suggested that decreasing magazine users would perceive significantly greater Internet niche width, competitive superiority and niche overlap between the two mediums. This hypothesis was supported for total Internet superiority and total niche overlap, but

not for total Internet niche width. On this variable, increasing *and* decreasing magazine users perceived the same degree of Internet niche width. See Table 18 below.

Table 18
<u>Means of increasing and decreasing magazine users for niche measures</u>

	Increasing ($\underline{n}$ = 48)		Decreasing ($\underline{n}$ = 64)		
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>p</u>
Total magazine niche width	.48	.16	.40	.15	**
Total magazine superiority	3.19	2.94	1.58	1.78	**
Total Internet niche width	.64	.18	.60	.18	*ns*
Total Internet superiority	6.91	4.68	9.71	4.83	**
Total overlap	1.30	.64	1.58	.66	**

* Significant mean difference at .01 level

<u>Hypothesis Five</u>

H5 predicted a positive correlation between age and total magazine niche breadth, niche overlap and magazine superiority. The older one was, the more niche breadth and competitive superiority one would perceive in magazines, as well as less competition between the media. This hypothesis was not supported for any of the measures: niche breadth ($\underline{r}$ = -.09 $\underline{p}$ = .10), niche overlap ($\underline{r}$ = -.08 $\underline{p}$ = .11) and competitive superiority ($\underline{r}$ = .02, $\underline{p}$ = .69).

<u>Hypothesis Six</u>

This hypothesis posited that there was a negative correlation between age and total Internet breadth and competitive superiority. This

hypothesis was supported. There was a significant negative correlation between age and Internet niche width (r = -17, p < .01) and Internet superiority (r = -13, p = .01).

Hypothesis Seven

With the idea that heavier newspaper readers may show a preference for the tactile, printed page, hypothesis seven stated that newspaper users will perceive greater total magazine width, overlap and competitive superiority than those who were not regular readers. As shown in Table 19, this hypothesis was not supported. And in fact, just the opposite was the case for niche overlap.

Table 19

Means of heavier newspaper readers and lesser readers for magazine niche measures

	Readers (n = 190)		Non-readers (n = 180)		
	M	**SD**	**M**	**SD**	**p**
Total magazine niche width	.45	.16	.42	.16	*ns*
Total magazine superiority	2.69	2.77	2.95	3.06	*ns*
Total overlap	1.20	.56	1.42	.60	**

** Significant at .01

Hypothesis Eight

This was based on the logical argument that since users with faster access can visit more sites and download more files than users with slower access, they would perceive the Internet to be more helpful, efficient, etc. Therefore, and more specifically: users with access speed

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greater than 56K (faster group) would perceive greater Internet width and superiority, and less overlap than users with access speed of 56K or less (slower group). The faster group (n = 115) comprised Cable, T1, ISDN/DSL access users while the slower group (n = 220) comprised 56K, 28.8K and slower access users. This hypothesis was not supported for any of the Internet niche measures: Internet niche width (df = 333, t = 1.35, p = .18), Internet superiority (t = 1.48, p = .14), or niche overlap (t = 1.13, p = .26)

Conclusion

This chapter presented the basic answers to the research questions and the results of hypotheses testing. Both increasing and decreasing magazine use was found, plus an increasing number of magazine gratifications were confirmed. Niche measures were calculated, showing overall a greater breadth and superiority on the part of the Internet over magazines. The total niche overlap score also suggested a degree of substitutability. Hypotheses testing generally confirmed a relationship between use and niche breadth and superiority measure scores, but the connection between use and overlap was mixed. A general connection between other possible indicators such as age, other media used and access speed was generally not supported as well. A discussion of these findings and recommendations for future research are featured in the following chapter.

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CHAPTER 5

Discussion

Introduction

After an historical look at how new media affected the magazine industry, and an explication of niche theory, this study followed a research plan with the goal of answering one of the most serious questions facing the magazine industry today. World Wide Web penetration in the U.S. has reached levels similar to that of television in the mid-1950s. Will this new medium have a similar negative effect on certain types of magazines as television did on general interest mass-market magazines? Or, due to the inherent capabilities and characteristics of these two mediums, will they find a way to coexist? Or, more importantly, what resource uses should magazines focus on in order to coexist with the Internet?

This exploratory study sought to find some general answers to these questions. The findings should help magazine publishers more fully understand the strengths and weaknesses of new media and then plan for the future, capitalizing on both the inherent, long-standing allure of print and the glamour and interactivity of the World Wide Web.

This chapter first discusses the research questions and hypotheses individually. Some broader conclusions and observations are presented in some additional post analysis and managerial recommendations. Finally, contributions to theory, weaknesses of the study and suggestions for future research are offered.

Research Question One

Are Web users reporting less magazine use? Yes, but some are reporting *more* magazine use.

The finding that 17% report a reduction in magazine use since becoming Web users suggests a displacement effect. It mirrors other studies focussed on identifying from where Web users get their time to spend on the Internet. The American Internet survey reported 16% reducing their magazine time to find time for the Internet (FIND/SVP, 1997). This study's pre-survey, conducted in the Spring of 1999, asked a similar question with 17% reporting a decrease in use and 8% reporting an increase.

To provide some context, however, the displacement potential of the Web over magazines may not be as strong as for some other traditional media. Dimmick's email-telephone study (Dimmick et al., 2000) asked a similar question with nearly one half (48%) reporting they were making fewer long distance calls since becoming email users. Only 8% reported an increase in long distance calls. Meanwhile, television seems to be taking a big hit as well: 35% of American Internet Survey respondents reported a decline in television viewing, and in the pre-survey for this study, 43% reported a decrease. So, the potential displacement for magazines is perhaps not as great of a threat compared to some other traditional media.

Conversely in this study, 13% reported an increase in magazine use, just a few points lower than those reporting less use. These numbers seem to confirm what some magazine industry observers have been alluding to. There is both a displacement and a complementary catalyst effect occurring for users of both mediums. In this case it may be almost as strong as the potential for displacement. The key question this raises is what are the specific differences — demographic and otherwise — between those citing decreasing and increasing use? What is

at the core of the Web creating displacement of magazines versus it becoming a catalyst for more magazine use? While this study did not set out to specifically answer this question, a look at some of the differences in demographic and media use variables might have perhaps shed some light on the issue.

However, there was no significant difference between increasing and decreasing users in the amount of time spent on the Web (about 3.5 hours per week). And this figure for both is significantly higher than the Web use for those who reported their magazine use had remained the same — about two hours ($\underline{df}$ = 2. $\underline{F}$ = 5.24, $\underline{p}$ < .01). This further supports the idea of both a displacing *and* complementary relationship. Increasing (complementarity) *and* decreasing magazine users (displacement) report higher Web use while those reporting static magazine use the Web at a lower level. This complementary, catalyst effect has been noted in a study by Robinson and Barth (1997). They concluded, "In general, new technology users are *more* likely to use more traditional media as well, particularly the printed media" (pg. 80).

A continuing general lack of differences between the increasing and decreasing magazine use groups held true for other basic variables such as age, the number of years they had been on the Web as well as broad categories of purposes for magazine and Web use. So, the reasons behind either a displacement or complementary effect perhaps lie within more specific use variables. This will be addressed a little later in the discussion.

<u>Research Questions Two and Three</u>

Just as media have increased in number and specialization, so have the gratifications sought by users. For magazines, no longer do

gratifications fall into the three basic categories of survelliance, diversion and interaction as used in earlier cross-media studies. The world is more complicated and so are media gratifications.

While the original magazine surveillance statements still loaded on surveillance, the original magazine interaction dimension disappeared, with its statements loading to surveillance. This dimension emphasized gathering information and staying informed for general purposes. This is one of the basic cognitive, information-seeking dimensions found in virtually all media gratification studies. Meanwhile, an "updated" interaction dimension, comprising statements emphasizing communication appeared. At the core of this dimension are statements related to new media interactivity — one-to-one, one-to-many, and many-to-many.

As with other studies, diversion was a dimension for both mediums, but the Internet apparently offered more, with the same statements that loaded to a single dimension for magazines, loading to two factors for the Web. One was identified as diversion and the other as eye candy. It could also be argued that the Self-actualization dimension is another type of diversion, certainly affective in nature like diversion and eye candy, but with an emphasis on "me." In sum, affective and diversionary functions have become increasingly specialized.

Another example of this increasing specialization is the presence of a job/career dimension. In earlier magazine studies, the job and career statements loaded on surveillance, grouped with other cognitive, information-gathering statements. Today, these and newly gathered statements load on a new dimension. This supports the findings of the Charney and Greenberg study. As media become more specialized, trade

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magazines and Web sites have become increasingly important to job survival and career planning in the last two decades. Magazines and the Internet serve a unique function — different from other mass media like television and radio — in this more cognitive area. Thus, the presence of this dimension.

However, it should be noted that this Career/Job dimension may just be an artifact of the samples used in this study and the Charney and Greenberg study. This sample comprised a group of semi-professional and professional musicians, while the Internet study used college students, many of which were about to enter the job market for the first time. These characteristics may have led to this job/career dimension for these two studies alone and may not be generalizable.

As with several other niche studies comparing new and old media, a gratification opportunities dimension was also identified. Several statements relating to efficiency and convenience gathered in the qualitative pre-survey loaded on this dimension. This finding supports the notion that when comparing two mediums with a degree of functional equivalence, gratification opportunities play a significant role in choice. New media researchers should include this dimension in further single- and multi-medium gratification studies.

One final note is the between-medium differences in the variance explained among these dimensions. For the Web, the surveillance/keeping informed dimension explained 33% of the variance, while for magazines it only explained 4%. For the Web none of the other dimensions accounted for any more than 8% of the variance explained. The highest for magazines was the career dimension, explaining 28% of the variance. Meanwhile, for the Web this dimension accounted for only

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3% of the variance. The high variance explained for magazines on this dimension may again be an artifact of the sample, with these subjects relying on a plurality of trade and special interest magazines regarding their profession. But if this were the case it seems the variance accounted for by the Web should be higher on this dimension as well. These large differences in the variance explained suggest magazines and the Web are used in dissimilar ways. However, the variance explained between mediums on the remaining dimensions were relatively close, ranging from zero to a couple of percentage points. This denotes similar use as well.

In sum, mass media gratifications are increasingly complicated and difficult to pin down, especially in a cross-media study such as this. But the general trend here is that, as media become increasingly specialized over time, the gratifications sought by users become increasingly specialized as well. Furthermore, the relative efficiency of a medium — gratification opportunities — is a defining characteristic among media. These dimensions of gratifications sought and gratification opportunities set the stage for calculation and interpretation of the niche measures.

Research Question Four

Question four utilized the niche breadth formulae to measure the relative generalism or specialism of magazines and the Web. Higher scores denote a wider spectrum of gratifications offered by that medium, while lower scores indicate fewer. In total, the Web serves a wider spectrum of needs and gratifications (niche breadth = .56), than magazines (niche breadth = .44).

What is most newsworthy here is that the Web provides a wider array of gratifications on all of the dimensions except one — diversion. Magazines (.58) are perceived to satisfy a wider degree of gratifications associated with diversion than the Web (.56). While the scores on most of the dimensions were relatively close, they were substantially different on two factors. Magazines' lowest breadth score was on the Communication/Interaction dimension (.17 vs. .44 for the Web) while the Web's highest by far was on gratification opportunities (.79 vs. .44 for magazines). The Web's substantially higher breadth scores on these two dimensions denote its ability to excel in the area of communications and utility — obviously due to its arsenal of new media characteristics.

Meanwhile, magazines should emphasize and capitalize on their diversionary uses. This finding is especially interesting in light of the trade-oriented demographics of subjects. Among a more generalizable sample, the diversionary capabilities of magazines might have been appreciated even more.

Research Question Five

This question measured the level of competition, or perceived similarity, between these mediums. Remember again that overlap is an inverse measure; the higher the score the less intense the competition, the less similar the mediums are perceived to be. A score of zero indicates complete similarity. However, the calculation is relative to the scale used to measure the gratifications. In this case a five-point scale was used so a score of 4.0 (5 minus 1) would indicate total dissimilarity. This makes it difficult to compare these findings to the overlap scores of other niche studies because different studies use different scales. But by converting the score to a percentage one is able to provide some context

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in comparing these niche overlap scores to those in other studies. Standardizing them in this manner, the competition can be characterized as strong to moderately strong for total overlap, and on a majority of the dimensions as well.

Self-actualization is the dimension in which magazines and the Web are perceived to be the most similar by far (overlap = .75). This dimension includes a number of affective gratification statements such as "to feel good," "to be happy" and "to live out a fantasy" and others. The next highest level of competition is along the diversion dimension (1.06), another dimension with affective leanings. Apparently users see magazines and the Web in a similar light when satisfying these types of emotional gratifications.

Dimensions displaying a relatively lesser degree of similarity are those having more to do with functionality and cognitive activities: communication (1.44), career (1.53) and gratification opportunities (1.93, the highest overlap score). As with niche breadth, the perceived dissimilarity along the communication and gratification opportunities dimensions can be attributed to the inherent differences in communication characteristics of the two mediums. Thus, they are perceived to be more dissimilar. The dissimilarity for the career dimension may have to do with the two mediums being used for distinct functions. For example, magazines may be used for job-oriented diversion, scanning and surveillance, while the Web is used for searching for employment and finding very specific information related to products, etc.

As niche theory suggests, competition decreases as the mediums find their respective niches. Competition is stronger along those

dimensions where magazines tend to offer the wider spectrum of gratifications (niche width). It is in these areas that the two mediums are perceived to be more similar.

Research Question Six

While niche overlap measures the degree of perceived similarity, and niche breadth indicates which medium offers more gratifications, they do not measure which medium is superior at filling the particular gratifications. This question was answered with Dimmick's competitive superiority measure. In total, the Web was considered to be nearly two-and-one-half times superior to magazines. The Web was significantly superior along all of the dimensions again except one — diversion. This was also the case with the niche breadth measures, and indicates the magazine medium's stronghold in finding coexistence with the Web. As mentioned earlier, a less career-oriented sample may have been even more favorable along this dimension.

But the Web was perceived to be significantly superior on all the other dimensions. And again like niche breadth, the Web superiority scores dwarfed magazine scores on the new media-oriented dimensions: communication (5.67 vs. .29) and gratification opportunities (12.58 vs. 1.26) — not a surprising finding. The other two dimensions with the greatest differences were surveillance and career — two dimensions that again lean towards cognitive information gathering. Overall, these scores show that the Web is a formidable foe — especially in the cognitive realm of information gathering and communication management.

Hypothesis One

The main purpose of the hypotheses was to identify the media use and demographic variables that seemed to be driving the niche scores.

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The goal was to shed further light on what was behind increasing, decreasing or static magazine use. That hypothesis one was supported for niche breadth and competitive superiority is not surprising. The overall assumption is that gratifications drive use. Therefore, use increases as individuals perceive the Web to offer an increasingly wider array of gratifications in an increasingly superior way. This was the case in total and for each dimension, a testament to the "mother of all media" nickname given by some to the Web.

And while the relationship between total niche overlap and Web use was not significant, it was in the two areas where the Web and magazines are most different on their face — the two new media dimensions of communication and gratification opportunities. As use of the Web increases so does the perception that they are increasingly dissimilar. These are the two areas where competition decreases as use of the Web increases. As users become more familiar with one medium they recognize and appreciate its differences from other media — good and bad. Interactivity and cognitive task efficiency are the two most obvious differences between the Web and magazines. So it is along these two dimensions that we see perceived dissimilarity increasing (competition decreasing) as Web use increases. In sum, the general results of this hypothesis would support the idea of the Web displacing magazines for those who increasingly used the Web. And the Web's competitive superiority over magazines reported early certainly supports the propensity to do so.

Hypothesis Two

Was this same idea of the increasing use of one medium leading to increasing niche scores the same for magazine use? This hypothesis

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predicted the same as hypothesis one, but for magazine use. The very low and insignificant correlation between the two questions used to measure magazine readership supported the idea of two distinct types of magazine users — a more committed reader who subscribed and a less committed single copy buyer. Thus, the hypothesis was tested for both scales.

As with hypothesis one, as subscriptions increased, users perceived magazines to offer a wider degree of gratifications and were judged increasingly superior. However, the perceived similarity of the two mediums did not change significantly as magazine subscriptions increased.

For the less committed single copy user, as single copy purchases increased magazines were also perceived to offer an increasing number of gratifications. However, the perception of similarity (overlap) did not change as well as the perceived superiority of magazines. The fact that superiority did not increase as single copy purchases increased is compatible with the idea that these magazine buyers are generally not as committed and not as "believing" in magazines as those who increasingly subscribed.

As with hypothesis one, no substantial trends were seen in the correlations for the individual dimensions. However, one may be worthy of note. The width of gratification opportunities increased as single copy purchases increased. Perhaps, these less committed users appreciated the relative convenience of going out, finding and purchasing a single copy of a magazine, when they were in the mood to really want one — a particular subject matter, article, etc. Standing in front of a large newsstand with hundreds of magazines provides a picture of breadth.

<u>Hypotheses Three and Four</u>

These are probably the most telling of all the hypotheses. They addressed the characteristics of displacement or complementarity between the two mediums. The grouping variable asked if magazine use had increased, decreased or remained the same since adoption of the Internet. While decreasing use obviously denotes displacement, increasing use suggests a complementary relationship that is even stronger than for those whose magazine use had remained the same. For those increasingly using magazines after adoption of the Web, the new medium is more than complimentary; it apparently serves as a catalyst for more magazine use.

What makes this especially interesting is that the difference between increasing (13%) and decreasing (17%) is relatively close. At least some degree of complementarity exists for that vast majority of magazine and Web users (70%). And as was mentioned earlier, there is no difference between increasing and decreasing users with the amount of time they have been using the Web. So, it is not as if magazine use increases (or remains the same) and then it drops off as Web users become increasingly mature — or vice-versa.

More support for the idea of displacement *as well as* a complementary catalyst is seen when the statistics for static magazine users are included. It also helps explain why perceived similarity between the mediums did not seem to be a factor in the first several hypotheses related only to magazine or Web use. Table 20 shows the mean differences in niche scores for decreasing, increasing *and* static users. Standard deviations are not included this time to promote simplicity.

Table 20

Means of decreasing, increasing and static magazine users for total niche measures

	Decrease (n = 48) M	Increase (n = 64) M	Same (n = 258) M
Total magazine width	.40*	.48	.44
Total Internet width	.64	.60	.53*
Total niche overlap	1.58*	1.30	1.24
Total magazine superiority	1.58*	3.19	3.05
Total Web superiority	9.71*	6.91	6.05

Note: * Denotes that the mean is significantly different from both other means at the .01 level of probability.

Here we see several patterns of interest. First, the evidence of a displacement effect for decreasing magazine users (17% of the sample) is fairly obvious. These individuals perceive magazines to be more specialized, less superior; and less similar to the Web (competition has decreased). For these users, magazines are settling into a more specialized niche, a more specialized set of fewer gratifications. Conversely, for these same decreasing print users, the Web is superior in satisfying a wider array of gratifications — a more generalized medium with superior characteristics. Competition is decreasing as well; decreasing users perceive the two mediums to be less similar than the other groups. Other niche studies have shown that over time, the level of competition decreases as the respective media settle into their niches. Again, more evidence for displacement.

But there is also some evidence of complementarity. First, keep in mind that 83% of the sample comprised those magazine users whose use had either risen or remained the same. This alone points to some degree of complementarity between the two mediums. But promoting the idea of a catalyst is that the Internet breadth score of *both* increasing and decreasing magazine users is higher than the group whose magazine use had remained the same. Increasing magazine users perceived a significantly higher degree of gratifications offered by the Web — they know what it has to offer — but for some reason their use of magazines has increased. The individuals have increased print media use since adopting the Internet.

The other trend evident here is that on the magazine niche measures, increasing magazine user scores were higher than static magazine users — but their Internet niche scores were higher as well. This also supports the notion of the Web acting as a catalyst for more use for this group

In sum, the displacement effect seems to be stronger for decreasing users, while the effect of the Web as a catalyst for increasing magazine use is somewhat present, but not as strong. The question that arises is what is driving displacement? And what keeps others in a static magazine use (complementarity) or increasing magazine use (catalyst) mode? The remaining hypotheses did not provide any obvious answers to these two important questions.

Hypotheses Five and Six

There was no significant relationship between the total niche measures for magazines and age. Thus, age is not an indicator that an individual's perception of magazines becoming an increasingly

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generalized medium, less similar to the Web and more superior. Meanwhile, there was a significant negative correlation, albeit moderate, between age and Internet width and superiority. This indicates that as one increases in age, the relative generalism and superiority of Web decreases. Conversely, the younger you are the wider the array of gratifications the Web offers in an increasingly superior manner. This provides some support for the idea that as teenagers age and become adults, they will show a tendency to prefer the Web over print media. And, since the opposite was not the case for magazines, this is probably not an effect of age, but a generational cohort effect brought on by the Web becoming a regular media appliance in the late 1990s.

Hypotheses Seven

Like age, a preference for print — as measured by regular newspaper reading — did not indicate a preference for magazines. There was no significant difference between heavier and lighter newspaper users in their perception of magazine breadth and superiority. But in terms of similarity of the two mediums, a finding in direct opposition to the hypothesis was significant. Newspaper readers perceived significantly greater similarity between the mediums than did non-readers. Regular newspaper readers perhaps appreciate the more affective components of habitual newspaper reading differently than the immediate, targeted news functions of the Web. However, there was no significant difference between newspaper readers and non-readers on total Internet niche width or total Internet competitive superiority. This may be because the specific news-oriented statements (breaking news, sports scores) did not load and were not included in the niche measures. These statements will

be appropriate when a niche study comparing newspapers and the Web is conducted.

Hypothesis Eight

Finally, the idea that faster access would create a preference for the Web was not supported either. Those accessing at speeds higher than 56K did not perceive the Web to be any more general, superior, or dissimilar to magazines than those accessing at 56K or lower. Thus, quick accessibility and speed of use does not seem to be driving preferences. The perceived differences must derive from specific content or uses or other needs and preferences within the individual.

Post Analysis

Upon answering the research questions and analyzing the hypotheses, we see some general trends, but no "smoking gun." In general, the Web is seen to offer a wider array of gratifications in a superior manner by increasing, decreasing and static magazine users. And increasing magazine users spend more time on the Web than static magazine users. The nagging question of what is driving increasing or decreasing magazine use was still not sufficiently answered.

Another way to explain the variance is by examining which dimensions contributed to the superiority ratings on both mediums for increasing and decreasing magazine users. This attenuates which media gratifications are most or least important to decreasing and increasing magazine users. Similar to other gratification niche studies, this was accomplished by examining whether the superiority rating "agreed" with either increasing or decreasing use. For example, a "match" occurred when an individual using magazines less rated the Web superior on a particular statement. Conversely, a match also occurred when an

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increasing magazine user rated magazines superior on a statement. In other words, this "matching" system identified which ratings given a medium were in agreement with an individual's self-assessed use patterns.

Examining these matches along each dimension helps identify those factors most related to driving increasing or decreasing use. As a further means of seeing differences and similarities, a match was also given when a static user's superiority score for magazines was higher than that of the Web on that dimension. The results of this analysis are presented in Table 25.

Table 25

Percentage of medium superiority scores matching self-assessed use patterns of decreasing, increasing and static magazine use since adoption of the Web

	Decrease "Match" (n = 48)	Increase "Match" (n = 64)	Static "Match" (n = 258)
Survelliance	80%	44%	45%
Eye Candy	64%	56%	56%
Diversion	61%	79%	72%
Communication	78%	33%	28%
Self-actualization	56%	70%	71%
Career	78%	38%	36%
Gratification Opportunities	94%	23%	14%
Total	92%	29%	25%

Those dimensions with the most substantial differences and similarities are insightful in explaining the perceived differences, advantages and disadvantages between magazines and the Web. For those decreasing in their use of magazines, the highest percentage of Web superiority matches occur among the more cognitive, information-gathering dimensions (surveillance and career) as well as the communications management dimensions (communication and gratification opportunities). This supports the idea that individuals reporting decreasing magazine use are more oriented towards cognitive information-seeking functions of these media. The Web is more suitable for these types of activities for these individuals.

Meanwhile, increasing magazine users matched most highly in the more affective dimensions of diversion, eye candy and self-actualization. These individuals are more oriented towards these types of magazine functions.

Not surprisingly, static magazine users were somewhat of a mixture with a tendency for higher magazine superiority matches on the several more affective dimensions (similar to increasing users) and even lower magazine superiority matches on the cognitive and communication dimensions (more similar to decreasing users). That static users matched most like decreasing users in communications and gratification opportunities — but still remained static in their magazine use — would indicate that these dimensions of communication management have the least impact.

The niche width scores reported earlier (RQ 6) further substantiate this idea of characteristic differences in three broad categories —

cognitive, affective and communication management. On average, the greatest differences in niche width (magazines lower) were seen in the more cognitive and communication management dimensions while differences in niche breadth were closest (magazines higher) among the more affective dimensions. This same trend holds true for the original niche superiority scores as well. The greatest differences were along the more cognitive and communication dimensions.

Finally, in examining the niche overlap scores the general trend was the two mediums perceived to be more similar among the affective dimensions (lower overlap scores) and less similar among the cognitive and communication management dimensions. The dissimilarities support the idea that magazines are finding a specialized niche as a medium associated with more affective gratifications.

Summary of Findings

Based on the data analysis of the niche measure scores and hypotheses above, the following observations are made.

1) The Web is displacing magazines for a relatively small percentage of individuals (17%). However, this is nearly offset by another group of individuals for which Web use seems to be acting as a catalyst for increasing print magazine use (13%). Meanwhile, the vast majority (70%) finds a complementary relationship between the two mediums, as their magazine use has remained the same after adoption of the Internet.

2) In general, the Web is perceived to offer a wider array of gratifications than magazines, and delivers them in a superior fashion. As Web use increases, these perceptions increase as well (or vice-versa since no causal order has been established).

3) The greatest differences between magazines and the Web in gratifications offered and superiority tend to be in the cognitive, information-gathering and communication management functions. Meanwhile, the least differences appear in the more affective (emotional) and more diversionary functions.

4) In general, the Web and magazines are perceived to be least similar in these information-gathering and communication management functions. They are perceived to be more similar in the affective, or diversionary functions.

5) Decreasing magazine users place more emphasis on the superiority of the Web's information-gathering and communication management characteristics.

6) Increasing and static magazine users seem to place more emphasis on the affective functions of magazines.

7) Supporting the notion of a catalyst effect, increasing magazine readers use the Internet at the same rate as decreasing magazine users, both of which are higher than static magazine users.

8) Increasing and decreasing magazine use is not driven by age, or by how long they've been using the Internet

9) A key variable that seems to be driving increasing or decreasing magazine use is whether individuals prefer to engage in these more affective functions in a tactile (print) or electronic (environment).

The findings of this study, coupled with the observations above, suggest several recommendations for magazine publishing professionals.

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Managerial Implications

Returning to a few of the basic, general questions raised in the justification section of chapter one, several professional recommendations can be made. The original general questions were 1) What exactly are the added dimensions of the Web? 2) What comprises the continuing lure of print? 3) How do they overlap? Having completed this study, the answers to these general questions provide information so magazine professionals can make appropriate strategic decisions.

Added dimensions of the Web. First, and most obvious, the Web offers the interactive communication capabilities associated with new media. No study was needed to come to this conclusion. But decreasing magazine users apparently find these capabilities more important than static and increasing magazine users. Thus, the advice for magazine publishers is to associate interactive functions of the Web with the brand name of their magazine. For example, rather than partnering with established new media companies, magazine publishers should build stronger associations between their brand names and the Web by incorporating message boards, chat rooms, email addresses and other communication devices into their Web sites. They should also bridge the print and online world with email addresses and other unique interactive functions promoted heavily in the printed magazine; again, connecting the brand name to the communication functions of the Web.

This leads to the second added dimension, theoretically identified as gratification opportunities. The Web offers economy, accessibility and convenience. Magazine Web sites should be more than just extensions of the printed magazine content; they should also act as a portal to the Web for information and activities associated with the general subject matter

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of the magazine. This is sometimes difficult to do because of competition between different sites, and publishers not wanting to "send readers away from our content." But by offering portal-type functions on its Web site, a magazine can associate its brand name with the accessibility and convenience of the Web.

Like the function above, the other substantial added dimension of the Web tends to be in the more cognitive functions associated with direct information seeking. And again, the superiority of the Web in this area seemed to be more important for decreasing magazine users. Thus, magazines should incorporate appropriate information-seeking functions into their Web sites. These might include such things such as searchable back issues, databases of price listings and product information, and other highly detailed information. The goal here is to satisfy visitors when they are in an information seeking, as opposed to a diversionary mode. There should also be timely "news" updates to satisfy this appetite for surveillance as well. Again, these strategies work to associate the brand name with the unique functions of the Web. Does a magazine have to give all this content away for free? No. It can provide a certain level of free content, but then offer deeper information to subscribers (print or online) only — more on this in a moment.

In sum, this study's findings suggest that the most important added dimensions of the Web are new media interactivity, convenience and detailed information.

The Lure of Print. Because so many individuals are reporting their magazine use to have either remained the same or actually increased after adoption of the Web, the lure of print certainly continues. This study's findings suggest that it is in the more affective, diversionary and

internally oriented functions that magazines still reign — or at least have the opportunity to do so. These areas seemed most important for static and increasing users. Apparently, for most individuals, the more affective functions (content and otherwise) offered by the Web may be more similar to television viewing than to reading.

This suggests that magazine publishers should emphasize using affective, diversionary content in their printed magazines combined with deeper information on their Web sites. Obviously this does not mean that every article in a print magazine should be about play or recreation. This simply means articles should lean towards fulfilling affective gratifications. Articles can provide a more affective experience on the printed page leading to related, but deeper, more cognitive content on the Internet.

An excellent example of this is what the editors of *Gig Magazine* began doing recently (after the conclusion of this study). For product buyer's guides, which are relatively cognitive in nature, a broader introduction and lighter synopses are featured in the magazine with color photos. The print article then extends onto the Web where the very detailed listings of many more products are listed. In other words, the print portion of the article leans towards being more affective and diversionary in nature, while the Web portion provides the detail for cognitive information searches. A similar approach is also being used for its "Gigging In" city guides. The printed magazines feature a broader overview of a city — almost a travel article — while the core listings of clubs and contacts to get gigs is available on the Web site. Other magazines are adopting a similar approach.

<u>Where they overlap.</u> The final broad, managerial question asked was in what areas do the Web and magazines overlap? As the niche overlap scores indicate, the areas where they tend to overlap more strongly are along the affective functions, where the two mediums seem most alike. And as was shown by matching self-assessed use patterns with superiority scores, it seems that an individual's preference for affective content — either in online or in tactile form — may be driving magazine use. So, by further distinguishing this affective content in the future, in either print vs. online form, magazine publishers can reduce the area of overlap. In short they need to differentiate the affective content of magazines, while presenting a different type of affective content on its branded Web site. What that content is exactly has not been determined at this point.

Generally, affective content is likely less expensive to produce than information-rich content. Thus, publishers can tend to offer affective content on a Web site for free; thereby drawing these types into their brand name. They might also keep magazine readers who are abandoning the tactile experience by improving and further distinguishing the affective content in the printed version of the magazine. All the while they can give some information-rich content away, but keep the majority of this type of content for subscribers or paying online readers.

The *Wall Street Journal* is another example, albeit somewhat extreme, of this idea. Understanding the differences between cognitive and affective content helps one understand why this business model works for the *WSJ*. Reading the *Wall Street Journal* is more of a cognitive, information-seeking experience than an affective, diversionary one. Thus,

while most print publishers have been unsuccessful at creating a profitable Web model, the *WSJ* has been successful because they have provided both a free and paid area, each with its own type of content. The free area comprises less-information rich (somewhat more affective content) while the paid area features the hard, cognitive data that visitors will pay for. Distinguishing between these two types of information is key to creating a successful business model for the Web. *Billboard Magazine* and other specialized publications have also been able to offer a combination of free and paid online content, with the deeper online content being made available as an added value to paid print subscribers, or as a separate paid online service.

People are not as used to paying for more affective, diversionary content. For example, feature films are for the most part a purely diversionary, affective experience, and people are willing to pay the price of admission. However, radio and television, which feature mostly affective content are based on advertiser-only revenues (and the information-rich content like news shows are supported and subsidized by the revenues from the affective content).

This idea is in some ways analogous to the broadcast and cable television industries — although television features mostly affective content. At one end of the spectrum is broadcast television, featuring basically more general, affective content sponsored by advertisers. Viewers put up with the advertising to gain access to the free content. At the other end of the spectrum is subscription-based movie channels, such as HBO and Cinemax featuring differentiated, but still mostly affective content. In between you have the advertising-based specialty channels — mostly offering more specialized, affective content. Due to

the more specialized and distinguished nature of this content, viewers are willing to both put up with the advertisements *and* pay an additional cable television subscription fee, at a much lower cost per channel than the HBOs.

Now, apply this general idea to magazines and their Web sites. At one end of the spectrum you have free content on the advertiser-supported Web site that is relatively more generalized and affective. Like broadcast television, people put up with the advertising in exchange for the free content. At the other end of the spectrum you have perhaps totally subscriber-supported content on the Web that is information-rich, more cognitive and more specialized. People are willing to pay for this information, and may not want to be bothered by advertisers. In the middle you have print magazine subscribers who appreciate all aspects of the subject matter and will pay for the printed version (with advertising) and for additional non-sponsored content online at a relatively lower rate (included with their subscription).

In another example of this idea, the formerly free, online-only publication *Slate* recently announced a two-tiered plan offering paid and free content (Press, 2001, March 21). Readers who pay an annual subscription fee of $30 will access the premium version, which blocks out larger ads (that appear on the free, lower-tiered version of the site). The paid portion of the site also includes feature stories not available on the free site. The problem here is that there is no printed version of the magazine; this is where conventional magazines have a vast advantage, in the long run, over e-zines. They can offer exponentially more value — different types of affective and cognitive content — with both a printed and online version.

In sum, what print magazine publishers can do better than e-zines is create a more effective combination of both free and paid cognitive and affective content in print and online form. First off the less costly, affective content can be available for free, but supported by sponsors (like television). This can include many affective new media functions as well. But available to subscribers (print or online) is the information-rich content that is more expensive to produce. Meanwhile, the printed magazine should emphasize and capitalize on the affective nature of the tactile reading experience, with enough cognitive information to keep readers satisfied and pull them onto the Web — when they are in an information-seeking mode. This combination strikes a balance between free and paid, and creates a financially sound business model. As we have seen in the recent collapse of many of dot-coms it is impossible to give content away and somehow make a profit on market share alone. The results of this study help publishers focus on what type of information to give away free and what to charge for. The key for magazines is to find the right balance both in degree and type of content — affective vs. cognitive — that is offered in the printed version of the magazine *and* on its Web site.

Contribution to Communications Theory

This study has made several useful contributions to communications and media theory. First, like several other media niche studies, it has supported the presence of a gratification opportunities dimension. This factor stems from the perceived accessibility, convenience and utility of a medium in obtaining gratifications. Scholars using the gratifications model to study media use are well advised to gather and include opportunity statements in their survey instruments.

Secondly, the relatively successful use of niche theory to help explain choice and use *between* competing media adds validity to the continuing use of this population ecology model to study media. This is further enhanced because many of the findings are logically consistent with some magazine industry practices. And because the vast majority of media niche theory work has been done by or in association with John Dimmick, an independent researcher's successful use of this theory adds further validity to the use of niche constructs.

Finally, this study provided some useful methodological findings for Internet research. Somewhat unexpectedly, the purposive Internet sample was not made up of relatively heavy Internet users. The significant differences between the non-random Internet sample and the random sample of subscribers were minor. This is not to say that Internet researchers should abandon random samples, or that convenient Internet samples can be generalized to a wider non-Internet population. But when conducting low-risk research *about* the Internet, a purposive Internet sample may be just as effective as a more costly random sample. This probably has more managerial implications for magazine professionals than anyone else. In the case of specialized audiences, and as Internet penetration increases, the Web is an increasingly valid method to collect useful data in a quick and cost-effective manner.

Weaknesses of the Study

As mentioned previously, one weakness of this study is in its external validity. Since a specialty magazine sample was used, the findings can only technically be generalized to that population. However, it is hoped that the choice of this magazine — one with above average

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Internet use levels, but not extremely high — would be fairly representative of both business and special-interest consumer magazines. If anywhere, the findings are least generalizable to the largest circulation consumer magazines.

Another specific weakness in terms of generalizibility is the average age of the sample. It skewed older. While the average age of Internet users is increasing, it is still in the mid-30s. The mean age of this sample was 41. As was mentioned earlier, from time to time age was included as a possible moderating variable in a number of statistical tests, but no substantial trends were identified. However, it could be that those trends would have been heavier and more significant if this sample would have been more reflective of the average Internet audience.

Other weaknesses of this study have more to do with internal validity. For example, scales could have been included or improved upon to provide more attenuated measurement as well as a better accounting for possible confounding variables. A case in point: How well did subjects differentiate between *Web* versus *Internet* use upon reading the definitions at the beginning of the survey? It would have likely been better to ask for total Internet use hours, then ask for a breakdown of time by activity — surfing, email, chat rooms, etc. Perhaps some of the ratings, especially on the more affective statements, came from their feelings on Internet uses that were not being directly investigated. Controlling for more specific types of Internet use may have been helpful in even more focused findings.

Also, the question of whether subjects had spent more, less or the same amount of times reading magazines was relative. A useful mediating variable in the analysis may have been whether the subject

was a light, medium or heavier magazine user at the time of adopting the Internet. Perhaps the Internet's effect of displacement or complimentarity was dependent on their relative level of magazine use in the first place. It could very well be that the displacement effect was more influential on originally heavy magazine users, while the catalyst effect was most influential on originally medium users. This could have been a powerful variable to control for.

Another dimension here may have been *time spent with* magazines versus the *number* of magazines they read. Perhaps individuals were spending more time, but with a fewer number of magazines or vice versus. This could be a distinguishing characteristic between affective magazine browsing (perhaps the same amount of time with a greater number of titles) and cognitive information-seeking (perhaps more time with fewer titles).

Finally, as Dimmick and others have pointed out, niche theory is better suited for anticipation than prediction. "It is more useful for describing and explaining the past and present than for making long-term predictions about the fate of media guild members" (Dimmick & Rothenbuhler, 1984, p. 118). Niche theory is weak at predicting immediate, specific individual behavior. Its strength is identifying and analyzing broad trends at the population level.

Having identified these weaknesses, following are suggestions for future research that this study might inspire.

Suggestions for Future Research

The most obvious research the results of this study lead to is a similar panel study in 18 months. Other niche studies have replicated after 18 months to see if the trends identified are becoming more of a

reality. Both street and email addresses have been retained for a possible study to this end. Another similar study should be conducted comprising newspaper readers and Internet news site users. As noted in chapter one, newspapers face a different threat from the Web than that of magazines because magazines have not traditionally been the deliverers of timely information. In the meantime, newspapers are positioned more strongly than broadcast media to provide text-based information on their Web sites. Will the same rough categories of affective and cognitive content play a role as has been suggested by this study?

Another direction these findings point to is in the area of content. This study suggests that readers use and perceive magazines and Web sites to be appropriate and efficient in specific situations. Magazines, for example, seemed to be often noted as diversionary devices. One question this raises is what is the relationship between the experience of diversion and the tactile nature of the printed page? In other words, what are the defining characteristics of the affective "reading" experience in the printed vs. online format. And even more basic than this, what exactly is affective or information-rich content? These terms have been used in a broad conceptual way, but a study identifying specific characteristics would have both theoretical and professional implications. A study more entrenched in the uses and gratifications perspective would be appropriate here.

Another variable that would play into this is whether the reader is in the diversionary mode or the information-seeking mode. Much research has been conducted regarding advertising effectiveness and the particular mode a reader or viewer is in. This same theoretical concept could be applied to reader satisfaction of editorial content. The basic

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research question being, are diversionary articles (or what types of diversionary articles) more satisfying when readers are in a browsing mode versus an information-seeking mode?

It should be noted here that diversionary subject matter is relative. What is considered hard-core information in one article (in a magazine or on a Web site) might be diversionary in another magazine or Web site. It is somewhat relative to the reader. However, another approach would be seeking to identify what types of subject matter are appropriate for what medium. What subject matters work best in each medium? This is beyond simple medium characteristics of video, audio and print.

Of course, the Web can add levels of interactivity to information-oriented articles, such as buyer's guides, that cannot be offered on the printed page. But in the area of diversion, is typical diversionary subject matter "more enjoyable" in the printed magazine format than on the Web where the reader must be at the computer?

For example, experimental design could be used wherein the same diversionary or affective type article text and photos was presented in printed, tactile magazine form to one group and presented to another group in Web e-zine form. Other variables could be accounted for in a factorial design with perhaps different levels of story length being presented in the Web version. After reading the article subjects would be administered an established instrument to measure reader satisfaction. Again, the general direction is getting at the question of what subject matter is best for each medium. With these questions answered publishers and editors would better know what types of articles to feature in print only, on the Web only and on both.

This also has to do with other issues such as story and sentence length as well. Professional advice offered in books on writing for the Web suggests that people want shorter stories and sentences, simpler information. Does this apply across the board to all types of material — informative versus diversionary? Some research in this direction has been conducted, but on newspaper and news reading. Magazines, again, have not been the focus of much attention. Research emphasizing diversionary subject matter and printed magazines would be useful theoretically as well as to the magazine and Web industries.

APPENDIX A

Mail version of survey and associated materials

(MSU School of Journalism letterhead)

October 17, 2000

Dear Reader:

As a magazine subscriber, you have been selected to take part in the enclosed survey as part of a doctoral research project at Michigan State University. It is about how people spend their time with conventional printed magazines and the World Wide Web. It consists of 51 questions and only takes about 15 minutes to complete.

Your responses are very important. Please read and answer each question carefully, and return the survey in the enclosed postage-paid envelope as soon as possible. As a way of saying thanks for taking the time to return the survey, if we receive your survey by November 10th you will be entered in a drawing to win a $100 gift certificate from a popular store.

The identifying number on the questionnaire is used to track responses and for follow-up mailings so a high number of surveys will be returned. All identifying information will be destroyed at the conclusion of the survey. The confidentiality of the questionnaire will be protected to the maximum extent allowable by law.

By completing and returning the enclosed questionnaire, you voluntarily agree to participate in this study. Please do so with the enclosed postage-paid envelope ASAP.

If you have questions, or would like a brief summary of the results, please contact me at (801) 378-1694 or by e-mail at randlequ@msu.edu. Or you may contact the chair of MSU's committee supervising research involving human subjects, David E. Wright, at (517) 355-2180.

Sincerely,

Quint Randle
Doctoral Candidate

WWW and Magazine Use Survey

Section 1 - Internet and Magazine Use

Before beginning the survey, please read the definitions below and keep them in mind as you answer the questions.

Magazine Use: Subscribing to or reading conventional printed magazines for consumer, special interest or business use. These may be monthly or weekly.

World Wide Web Use: Viewing and reading Web pages published by organizations or individuals for consumer, special interest or business use. For the purposes of this study, WWW use does not include the use of email, chat rooms and message boards (directly interacting with other individuals or groups of individuals).

1) How many hours did you spend visiting Web sites in the last week? (Do not include time spent emailing, in chat rooms or on discussion boards.)

[ ] 0
[ ] Less Than 1 Hour
[ ] 1-2 Hours
[ ] 2-3 Hours
[ ] 4-5 Hours
[ ] More than 5 Hours

2) What is your primary type of Internet connection?

[ ] 14.4K Modem (or slower)
[ ] 28.8K to 56K Modem
[ ] ISDN
[ ] T-1/T-3/Fractional T-1
[ ] Cable Modem/DSL
[ ] Don't Know
[ ] Other (Please specify): _____.

3) From where do you access the World Wide Web most frequently?

[ ] Home   [ ] Work   [ ] School   [ ] Other : _____.

4) How long have you been accessing the World Wide Web at home, work or school?

[ ] Less Than a Year [ ] 1-3 Years [ ] 4-6 Years [ ] More than 6

5) With the total being 100%, how do you spend your time reading and viewing WORLD WIDE WEB pages? (The total of the following 4 items should equal 100%)

General Interest/Entertainment   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Special Interest/Hobby   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Business/Work   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
School/Education   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

6) How many weekly or monthly magazines (printed) do you subscribe to?

[ ] 0   [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6 or more

7) Over the last month, how many magazines did you buy on a single copy basis? For example, at a newsstand, convenience store or grocery checkout.

[ ] 0   [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6 or more

8) Since becoming a World Wide Web user, has the amount of time you spend reading magazines...

[ ] Increased
[ ] Remained the Same
[ ] Decreased

9) With the total being 100%, how do you spend your time reading print MAGAZINES?
(The total of the following 4 items should equal 100%)

General Interest/Entertainment   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Special Interest/Hobby   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Business/Work   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
School/Education   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

10) On average, how many hours of television do you watch a day?

[ ] 0
[ ] Less Than 1
[ ] 1
[ ] 2
[ ] 3
[ ] 4
[ ] 5 or more

11) Did you read a local newspaper yesterday?
[ ] Yes   [ ] No

Section 2 - Rating Magazine and Web Use

This next section asks you to rate "how helpful" printed magazines and WWW sites are on 35 statements, with 1 being LEAST helpful, and 5 being MOST helpful. Please circle your response. Please remember the definitions you read at the beginning of the survey.

12) They offer companionship. (1 = least helpful, 5 = most helpful)

Magazines   1   2   3   4   5
Web sites   1   2   3   4   5

13) They offer information to pass on to others. (1 = least helpful, 5 = most helpful)

Magazines   1   2   3   4   5
Web sites   1   2   3   4   5

14) They help me to understand what's going on.

Magazines   1   2   3   4   5
Web sites   1   2   3   4   5

15) ... offer immediate news.

Magazines   1   2   3   4   5
Web sites   1   2   3   4   5

16) ... to improve the quality of my lifestyle.

Magazines   1   2   3   4   5
Web sites   1   2   3   4   5

17) ... to look at photos.

Magazines   1   2   3   4   5
Web sites   1   2   3   4   5

18) ... to play.

Magazines   1   2   3   4   5
Web sites   1   2   3   4   5

19) They help me to gain status. (1 = least helpful, 5 = most helpful)
Magazines   1   2   3   4   5
Web sites   1   2   3   4   5

20) ... to learn about famous people.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

21) ... to locate exactly what I'm looking for.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

22) They help me because they are economical.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

23) ... to be happy.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

24) ... to keep abreast of events.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

25) ... to give me information on job matters.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

26) ... to combat boredom.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

27) ... to live out a fantasy.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

28) ... to contact authors and editors.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

29) They help me by being readily accessible. (1 being least helpful, 5 being most helpful)

| Magazines | 1 | 2 | 3 | 4 | 5 |
| Web sites | 1 | 2 | 3 | 4 | 5 |

30) ... to teach me about common issues.

| Magazines | 1 | 2 | 3 | 4 | 5 |
| Web sites | 1 | 2 | 3 | 4 | 5 |

31) ... to meet new people.

| Magazines | 1 | 2 | 3 | 4 | 5 |
| Web sites | 1 | 2 | 3 | 4 | 5 |

32) They help me because they are convenient.

| Magazines | 1 | 2 | 3 | 4 | 5 |
| Web sites | 1 | 2 | 3 | 4 | 5 |

33) ... to express my opinion.

| Magazines | 1 | 2 | 3 | 4 | 5 |
| Web sites | 1 | 2 | 3 | 4 | 5 |

34) ... offer interesting stories to pass on to other people.

| Magazines | 1 | 2 | 3 | 4 | 5 |
| Web sites | 1 | 2 | 3 | 4 | 5 |

35) ... to feel important.

| Magazines | 1 | 2 | 3 | 4 | 5 |
| Web sites | 1 | 2 | 3 | 4 | 5 |

36) ... to follow up and get in-depth information.

| Magazines | 1 | 2 | 3 | 4 | 5 |
| Web sites | 1 | 2 | 3 | 4 | 5 |

37) They help me pass time. (1 being least helpful, 5 being most helpful)

| Magazines | 1 | 2 | 3 | 4 | 5 |
| Web sites | 1 | 2 | 3 | 4 | 5 |

38) ... to locate past and future articles.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

39) ... help me with my job.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

40) ... to find products through advertisements.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

41) ... to get information quickly.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

42) ... to make buying decisions.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

43) ... to relax.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

44) to get information like weather, stocks and sports.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

45) ... to look at interesting graphics and pages.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

46) ... to feel good.

Magazines   1 2 3 4 5
Web sites   1 2 3 4 5

Section Three - Demographics

Now just a few demographic questions. Remember, this information will be kept completely confidential, and will not be used for any other purposes than this study.

47) Are you male or female?

[ ] Male   [ ] Female

48) In what year were you born? _____.

49) What is the highest level of school you completed?

[ ] 8th grade or less   [ ] Some college or 2-year degree
[ ] Some high school, but did not graduate   [ ] 4-year college graduate
[ ] High school graduate or GED   [ ] Graduate Degree

50) Your annual household income falls in which of the following categories

[ ] Less than $15,000
[ ] $15,001-$30,000
[ ] $30,001-$45,000
[ ] $45,001-$60,000
[ ] $60,001-$75,000
[ ] $75,001-$90,000
[ ] More than $90,001

51) Do you have any final comments on magazine and Web use?

Thank you for completing the survey.

If you would like to receive a brief summary of the results of this study when it is completed, or have any other questions or comments study, please contact me at 801-378-1694 or via email at randlequ@msu.edu. Thanks again for your help.

Quint Randle
Doctoral Candidate

IMPORTANT NOTICE

You were invited to participate in a study
about two weeks ago, but we have not
received your completed survey.
Your responses are very important to us. Please
complete and return
the survey ASAP. Thank you.

Quint Randle

Doctoral Candidate — Michigan State University
801-378-1694 quint_randle@byu.edu

(MSU School of Journalism letterhead)

November 9, 2000

Dear Reader:

A few weeks ago, you were invited to participate in an important study about magazines and the Internet.

But we have not received your completed survey.

Because your responses are so important, we have sent you another copy of the survey, which begins on the back side of this page.

Please return it in the postage-paid envelope as soon as possible.

Sincerely,

Quint Randle
Doctoral Candidate

APPENDIX B

Web version of survey and associated materials

Introductory email message

Dear Gig Reader:

You have been selected to participate in an important study
sponsored by Michigan State University regarding Web use and
printed magazines.

This study is about your general Web and conventional
magazine use, NOT specifically about Gig Magazine or our Web
site. So think broadly as you answer the questions.

We're counting on your participation. (As an added incentive
one respondent will receive a $100 prize.)

Click on the link below or paste the URL into your browser
to take the survey now.

http://ucs.byu.edu/artcom/comm/qbr3/survey1.html

Again, your participation and responses are very important.

Thanks,

Bill Evans
Editor

PS - If by chance you already received this survey via snail
mail, please return that version instead of taking this one.

Readers:

About a week ago I invited you to participate in an Internet survey. If you have not completed this survey it would be great if you could do so as soon as possible. Your individual responses are VERY IMPORTANT.

The survey only take about 10 minutes to complete and a prize of $100 is being awarded.

Point your browser to:

http://ucs.byu.edu/artcom/comm/qbr3/survey1.html

If you have already completed the survey, please disregard this notice. Thanks again for your help.

Bill Evans
Editor

***

Readers:

Thanks to all of you who have completed the Internet use survey.

If by chance you have not completed this survey it would be great if you could do so as soon as possible. Your individual responses are VERY IMPORTANT.

The survey only take about 10 minutes to complete and a prize of $100 is being awarded.

Point your browser to:

http://ucs.byu.edu/artcom/comm/qbr3/survey1.html

Thanks again for your help.

Bill Evans
Editor

Screen shot of partial intro page

MICHIGAN STATE UNIVERSITY

SCHOOL OF JOURNALISM
TELEPHONE (517) 355-6430
FAX (517) 355-7710

EAST LANSING • MICHIGAN • 48824-1212

Dear Reader:

As a magazine subscriber, you have been selected to take part in the following survey as part of a doctoral research project at Michigan State University. It is about how people spend their time with conventional printed magazines and the World Wide Web. It consists of 51 questions and takes less than 15 minutes to complete.

Your responses are very important. Please read and answer each question carefully. As a way of saying thanks for taking the time to complete the survey, you will be entered in a drawing to win a $100 gift certificate from a popular store.

The confidentiality of your responses will be protected to the maximum extent allowable by law.

Screen shot of definitions page

Section 1 - Internet and Magazine Use

Before beginning, please read the definitions below and keep them in mind as you answer the questions.

Magazine Use: Subscribing to or reading conventional printed magazines for consumer, special interest or business use. These may be monthly or weekly.

World Wide Web Use: Viewing and reading Web pages published by organizations or individuals for consumer, special interest or business use. For the purposes of this study, WWW use does not include the use of email, chat rooms and message boards (directly interacting with other individuals or groups of individuals).

Click here to begin questionairre....

Screen shot of first page of survey questions

WWW and Magazine Use Survey

Section 1 - Internet and Magazine Use

1) How many hours did you spend visiting Web sites in the last week? (Do not include time spent emailing, in chat rooms or on discussion boards.)

- ○ 0
- ○ Less Than 1 Hour
- ○ 1-2 Hours
- ○ 2-3 Hours
- ○ 4-5 Hours
- ○ More than 5 Hours

2) What is your primary type of Internet connection?

- ○ 14.4K Modem (or slower)
- ○ 28.8K to 56K Modem
- ○ ISDN/DSL
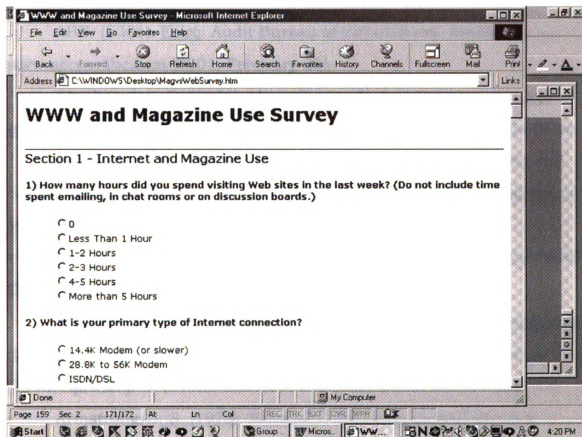
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