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Nandan Dixit
San Jose State University

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**A case study of uses and gratifications that people seek from a
special interest computer magazine**

Dixit, Nandan Ashish, M.S.

San Jose State University, 1991

U·M·I

300 N. Zeeb Rd.
Ann Arbor, MI 48106

**A CASE STUDY OF USES AND
GRATIFICATIONS
THAT PEOPLE SEEK FROM
A SPECIAL INTEREST COMPUTER MAGAZINE.**

A Thesis

Presented to

The Faculty of the Department of Journalism

and Mass Communications

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Nandan Dixit

May 1991

APPROVED FOR THE DEPARTMENT OF
JOURNALISM AND MASS COMMUNICATIONS

David Grey, Ph.D.

Steven Greene, Ph.D.

William Tillinghast, Ph.D.

APPROVED FOR THE UNIVERSITY

ABSTRACT

A Case Study of Uses and Gratifications that People Seek from A Special Interest Computer Magazine

by Nandan Dixit

This thesis examined why people read Shareware (a special interest computer magazine) by exploring the different types of gratifications people seek to satisfy from this publication, and how important these gratifications are to them.

The study extended the applicability of gratification typologies to encompass the field of special interest computer magazines. Research on the subject revealed that the primary reason for reading Shareware is for information and guidance. Shareware readers sought more gratifications from the information and guidance category than they did from the entertainment, the reinforcement and communicatory utility, or from the advertisement categories. However, research did not prove that the more readers sought gratifications from a particular category, the more they read material in the magazine that they perceived to supply information in that category.

DEDICATION

This thesis is dedicated to memories of my late sister, Kanan.

ACKNOWLEDGEMENTS

There are several people to whom I am very grateful for helping me complete this project. First, to Dr. Grey for his patience, guidance, and valuable suggestions. My thanks to Dr. Greene for his advice; especially for his help with designing my questionnaire. Thanks also to Dr. Tillinghast for his guidance with the statistical analysis. My gratitude to the staff at Shareware Magazine for their immense cooperation and their enthusiasm for my project. And finally, to my husband, Ashish, without whose constant encouragement, "pep talks," and help there would have been no thesis.

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Chapter 1

INTRODUCTION AND RATIONALE

During 1982-83, many specialized computer periodicals were introduced into the magazine publishing industry following the growth of the home and table-top computer industry. It was reported that computer publishing is "the fastest-growing end of a magazine industry that has flourished in recent years by producing publications with a 'niche' in the marketplace" ("Boom in," 1983, p. D1,26). At the time, these computer magazines were hailed as the healthiest part of the magazine publishing industry. According to the Ayers Directory of Publications (1980) the combined total of periodicals on the subjects of automation and computers in 1980 was only 58. By 1983, however, there were about 200 computer magazines available in the market. "The pace of high technology innovation is nowhere more evident [than] in the proliferation of publications serving the high technology industry and other professions that have found a need to establish computer magazines emphasizing their specialty. Not a month goes by, without new publications springing up, chasing after new technologies or products," (Schwartz [ed.], 1983). Even today, computer magazines are thriving in the special interest magazine market. There exist over 360 computer magazines in the United States, according to the Gale Directory of Publications and Broadcast Media, (1990).

Since the 1950s and 1960s, a number and variety of specialized magazines on various topics have been springing up in the United States at an accelerating pace. These magazines focus on particular subject matters of interest to a limited number of readers. Wolesley (1977)

wrote that nearly 3,000 business periodicals are published for readers who are salesmen, manufacturers, dentists, chain store operators, or involved in hundreds of other activities. "Magazines exist by the dozens for science, sports, photography, and other special interests which are for segments of the consumer group" (p. 23). Specialized magazines cover virtually unlimited number of topics from cooking and crafts to camping, boating, and money.

Computer periodicals have been viewed as the ultimate special interest magazines wherein the involvement of the reader is enormous and continuous (Maryles, 1983). These magazines are not as difficult to read and understand as technical manuals because they are livelier and are meant to provide information to non-specialist users. The survival and popularity of computer periodicals confirms one point: The readers of these magazines seek to satisfy certain needs by reading these periodicals. Otherwise, computer magazines could not have survived and flourished for almost a decade in the intensely competitive magazine market. The needs readers seek to satisfy could range from gathering information, to seeking entertainment, to helping them form opinions and so forth.

One such narrowly focused computer periodical is Shareware. The magazine is designed to be understood by non-specialist readers and does not use a lot of technical jargon because the readers are software users who use software at home, at work, or at school for a variety of purposes like work processing, accounting, entertainment and so forth. It contains all kinds of information about software and related issues. Shareware readers have at least one point in common--they are all interested in reading about computer software.

The purpose of this study, therefore, is to examine the reasons why people read Shareware. Based on studies of typologies of media gratifications in uses and gratifications theory, the study

will explore the different types of gratifications or needs that people seek to satisfy from this publication, and how important these gratifications are to them.

This case study of Shareware is intended to broaden and enhance the body of knowledge available in the specialized computer magazine field and provide another link between the magazine media and uses and gratifications research. This is an area that has been previously unexplored. Such data should also help computer magazine publishers and future researchers evaluate the purposes a magazine such as Shareware serves for its readers and help provide useful guides in magazine management and development of editorial policy.

CHAPTER 2

LITERATURE REVIEW

SPECIALIZATION OF MASS MEDIA

Specialized Uses and Gratifications

Specialization permeates the structure of a modern economic and social system, especially, in highly advanced technological societies such as the United States. More and more specialization takes place due to the steady expansion of knowledge and technology. There has been a trend toward increasing specialization in the broadcasting industry, in newspapers, and in book publishing.

Broadcasting has seen an increased demand for local broadcasting as against further growth and development of nationwide radio, television, and cable network. In the newspaper field, the big metropolitan newspapers have declined and the suburban dailies and weekly newspapers have increased along with the rise of the city magazines (van Zuilen, 1977). Garneau (1990) noted that although the total circulation today is at an all-time high of more than 60 million, the percentage of U.S. households receiving a newspaper has dropped from 90% in 1970 to 64% in 1990. At the same time, magazine sales had doubled in circulation since 1952 (Garneau, 1988). For example, Shaw (1977) said that in the 1970s, the New York Times introduced a weekend section which increased its Friday circulation by 40,000 and added new sections like a living section and suburban sections to the publication.

In the consumer magazine field, a need for more specialized information has stimulated an increase in the number of special interest periodicals. Petersen (1964) wrote that in the 1950s and 1960s, as education, income, and leisure time rose, the interests of American people broadened and deepened into more and more subjects. Many new magazines appeared to cater to the changing needs of people, and there was a striking proliferation of specialized magazines. Thus, according to van Zuilen (1977), there has been an increasing specialization of magazines resulting in a homogeneity of the readership. Highly specialized journals, periodicals, and abstracts have also become available.

This increased specialization extends beyond the scientific and consumer magazine field to that of professional, trade, technical, industrial, institutional, and general business periodicals. For example, professional magazines are read by people in specific professions such as law, banking, and dentistry, while industrial and technical magazines are usually concentrated on a single industry or product. "The specialized magazine exists because the general periodical cannot possibly find space to gratify such varied and intense interests," (Wolesley, 1969, p.325). As a result, the specialized magazines generally have one or more well defined, homogenous groups of interested readers.

It is these readers who have popularized the specialized periodicals. Since a publication depends heavily on the loyalty of its readers, it obviously must cater in many ways to the tastes, demands, and interests of its readership. These specialized publications "supply the contemporary reader with factual and up-to-date information and reading material about his hobby or sphere of special interest," (van Zuilen, 1977, p.40). Many specialized magazines have now begun providing information that trade and technical publications normally provide. Readers would be unable to get such ideas and information from other sources.

“The regular purchaser or subscriber of today’s special interest magazine tends to read more of it, more thoroughly, and with greater interest and retention than he usually reads or browses through other publications, watches television, or listens to radio programs,” (van Zuilen, 1977, p.41).

In short, the needs and interests of people have changed with specialization entering every sphere of the social structure. These publications expand and evolve with life itself, serving and entertaining people at all times, in every walk of life. This has led to the popularity and abundance of special interest magazines.

Specialized Publications

Van Zuilen (1977) noted that long-established and well-known general interest magazines like Collier’s, The Saturday Evening Post, Look, and Life were all dual-audience publications, aimed at both men and women, of varying age groups, occupations, incomes, interests, and educational levels. These magazines offered their millions of readers a diversified and general interest editorial content. In 1972, however, the sole surviving general interest, mass audience magazine, Life, ceased publication.

Events occurring from the 1950s through the 1970s led to the decline of these and many other general interest magazines. Among the causes were managerial and editorial weaknesses, postal rate increases, and changing attitudes of readers and advertisers. During the 1950s and 1960s, television drew away large amounts of advertising revenues from the mass audience magazines. As these magazines were heavily dependent on advertising for their success and profits, their very survival was endangered.

Another important cause of the magazines' decline was the increasing specialization of the media, which led, in the magazine field, to the rapid rise and prominence of special interest periodicals. Bogart (1956) wrote that the rise of the special interest magazines had started as early as the 1950s when television was growing, and magazines were forced to change their editorial formula. At this time, magazines tended more towards specialization. Wolesley (1973) stated that when the general appeal periodicals were on their way out or limiting their circulation size, hundreds of highly specialized periodicals reflecting the new interests and activities of Americans in the 1970s were appearing--ecology, apartment living, and snowmobiling, for instance.

The management, publishers, and editors of the general interest, mass audience magazines failed to see in time that advertisers were now losing interest in reaching the mass audience. Rittner (1989) wrote that advertisers were not interested in paying high rates to reach an audience that had no interest in buying their products. They did not want to spend money on advertisements in magazines for disinterested readers. These advertisers were far more interested in reaching a certain group of people. According to van Zuilen (1977), this was leading to an increased specialization of the mass media. Advertisers were now reaching for a specific, homogenous group of people, and they knew how to achieve this--through specialized periodicals.

Petersen (1964) noted that the number of specialized magazines was limited by only two considerations at the time: first, by the number of special interests with enough potential buyers of advertisers' goods and services and, second, by the number of advertisers willing to pay an adequate sum for reaching the consumers whom the publisher had chosen.

And this resulted in the growth of numerous special interest or specialized magazines with selected, well defined, and homogenous audiences, and editorial targets.

Computer Magazines

In 1980, the Ayers Directory of Publications did not even carry a separate section listing computer magazines. Periodicals on automation and computers were listed together as one section with a combined total of 58 publications. The year 1983 was extraordinary for computer publishing, marked by the appearance of scores of new magazines, journals, and computer books (Sigel, 1984). In 1983 there were more than 200 computer magazines available. The rapid growth of these magazines had followed the growth of the home and table-top computer industry. A Business Week article ("An Avalanche," 1983, p. 90), said that with computer sales growing at 46% a year, the market for computer-specific magazines "is just crazy." Computer magazine sales had increased dramatically in 1982-83 and were doing so well that they were considered to be the best selling magazines.

Despite its focused audience, the computer niche has continued to widen consistently since the early 1980s, and there are some 360 computer magazines available in the United States today. The circulation of these magazines runs anywhere from a few hundred to 500,000 readers. Together, the five highest-circulation computer magazines have a circulation of more than 2 million copies today (Boyden and Krol [eds.], 1990).

Maryles (1983) agreed that there had been a boom in the "category of specialty magazines" noting that there were more than 200 computer magazines at that time with new ones being announced regularly (p. 58). Two of the three 1982 magazines with the most pages per issue were computer periodicals. In 1981, only one computer magazine, BYTE, had made

the list of Folio 400 (the magazine industry's equivalent of Fortune 500); in 1982, nine publications qualified. Such an increase was unprecedented in the history of magazine publishing.

Also, it was reported that two of the three publications in 1982 with the most pages per issue (which is one way of measuring a publication's success) were computer magazines ("Boom in," 1983). And while most magazines in the United States in 1982 achieved little or no increase in advertising (another way of measuring a publication's success), BYTE, grew by more than 1,000 advertising pages that year. Many brand-dedicated computer magazines received about one-half their revenues from circulation and the rest from advertising. In fact, both hardware manufacturers and software producers, who need highly targeted audiences, advertise in these publications. To advertisers (who are the main source of income for magazines), computer publications are an efficient way of reaching their target audience.

A deluge of computer periodicals was also aimed at specific professions or industries like medicine, law, education, and others. Besides this, as various brand name computers gained a foothold, magazines were created for the users of these machines. Therefore, computer magazines reporting on IBM, Apple, and Radio Shack computers were doing well. The result of booming sales of IBM PC and related products attracted many magazine entrants and resulted in the rise of the IBM PC-specific periodicals. Publishers also began producing narrowly focused magazines, dealing for example with computer software. An examination of the editorial content of computer magazines listed in Manning (1990) revealed that the computer magazines available today are narrowly focused on topics for readers interested in reading specific material on IBM PCs, Macintosh, UNIX, MS DOS, computer products, LAN, computer graphics, microcomputers, robot technology, computer management and such others.

Maryles (1983), wrote that the computer periodicals are viewed as the ultimate special-interest magazine wherein the involvement of the reader is enormous as well as continuous. People who are planning to buy a computer as well as recent purchasers of such are the core group of purchasers of these magazines. These periodicals provided the readers with a variety of information on the subject. Benoit (1983) stated that the computer magazines' content touches on far more than technical information. Among other things, they provide general information on, for example, who is leasing IBM PCs to banks and to financial institutions, how-to advice (how to write software programs), and information on computer games.

Some computer magazines provide information to non-specialist users trying to pick out the proper software package or looking for information on what kinds of personal computer to buy and on how to utilize it (Sigel, 1984). Heath (1984) wrote that subscribing to a computer magazine that specializes in your computer is a sure way of discovering new software being produced by independent vendors. Glossbrenner (1984) stated that software reviews play a crucial role in helping identify the programs that are right for a person. These reviews explain the product's features, highlight its strong points, point out weaknesses and potential problems and generally provide information on what it is like to use the program.

USES AND GRATIFICATIONS THEORY

Development and Assumptions

Katz, Blumler, and Gurevitch (1973-74) said that interest in the gratifications that media provide their audiences goes back to the beginning of empirical mass communication research. Some mass communication researchers had "felt the need for a shift to a vision of the mass communication process that more clearly embraced the concept of an active audience" (Palmgreen, Wenner, and Rosengren, 1985, p. 11). McQuail (1969, p.71) wrote, "The failure of much research to produce evidence of direct effects on those 'exposed' to mass communications has led to a search for new strategies of enquiry. One of these strategies has been the increase of emphasis on the 'functions' of mass media for its users, in an effort to account for the high levels of media consumption, apparently without an adequate explanation and without measurable effects." Therefore, the media gratifications approach has two main advantages--it helps in understanding the significance and meaning of media use, and it also suggests a range of new intervening variables to be taken into account in the search for effects.

However, the early studies did not result in a cumulative, detailed picture of media gratifications which could result in the formulation of theoretical statements. "Since the publication of the Blumler and Katz (1974) landmark volume, The Uses of Mass Communication, research into the uses audience members make of the mass media, the gratifications derived from media consumption, and their antecedents and consequences has continued at an accelerating pace" (Palmgreen, 1984, p. 20). Rosengren (1974) observed that when the history of mass communication research would be written, the early 1970s are likely to be treated as a time when the tradition of uses and gratifications studies was revived and a number of attempts

were made to realize its early promise. Current uses and gratifications theory, according to Palmgreen et al. (1985), posits that "change will arise from the dynamic interaction of an active, resourceful audience with responsive and equally resourceful media systems, within the context of fluctuating social, political, and economic environments (p. 35)."

Palmgreen (1984) noted, "Uses and gratifications researchers have long been opposed to the old 'hypodermic needle' concept of a passive media audience, absorbing uncritically and unconditionally the symbolic output of all-powerful media" (p. 40). Katz, Blumler, and Gurevitch (1974) wrote, "We have confronted the image of the beery, house-slippered, casual viewer of television with the notion of the more 'active' audience--knowing that both are true" (p. 30). The uses and gratifications theory, therefore, asks not what the media do to people, but what people do with the media. "To assert that mass communication is a latter-day opiate of the masses presupposes a media-output audience-satisfaction nexus that gratifications research treats as hypothesis rather than fact," (Katz et al., 1974, p. 30). Therefore, not just the effect of mass media on audiences should be studied, but also the audience's active interaction with mass media.

During the 1970s, thinking about the media gratifications process matured. Many assumptions of the approach crystallized or were revised, and there was substantial theoretical advancement.

Katz et al. (1974) described this theoretical integration as one concerned with (1) the social and psychological origins of (2) needs, which generate (3) expectations of (4) the mass media or other sources, which lead to (5) differential patterns of media exposure (or engagement in other activities), resulting in (6) need gratifications and (7) other consequences, perhaps mostly unintended ones.

Katz et al. (1974) singled out five elements for comment as assumptions on which the uses and gratifications approach rests. They are:

- 1) The audience is conceived of as active. Although media exposure often has a casual origin, patterns of media use are shaped by more or less definite expectations of what certain kinds of content have to offer the audience member.
- 2) In the mass communication process, much initiative in linking need gratification and media choice lies with the audience member.
- 3) The media compete with other sources of need satisfaction. The needs served by mass constitute but a segment of the wider range of needs, and the degree to which they can be adequately met through mass media consumption certainly varies.
- 4) Many of the goals of mass media use can be derived from data supplied by individual audience members themselves.
- 5) Value judgments about the cultural significance of mass communication should be suspended while audience orientations are explored on their own terms.

Based on the assumptions on which the uses and gratifications theory rests, some observations about computer magazine readers could be made. As the media audience is conceived of as active, computer magazine readers could be an active audience with definite expectations of what computer magazines have to offer them. As the audience member takes much of the initiative in linking need gratification and media choice, computer magazine readers could be choosing to read these specific magazines for certain gratifications. Also, as many of the goals of mass media use can be derived from data supplied by the individual audience members themselves, computer magazine readers should have the ability to supply data about why they believe they read computer magazines.

Therefore, computer magazine readers should be able to answer questions if surveyed on why they read these publications and what gratifications they derive from them.

Typologies of Media Gratifications

One of the priority issues in the development of an adequate theoretical basis of media gratifications is what constitutes the typologies of media gratifications. Each major piece of uses and gratifications research has yielded different classification schemes of audience functions (Katz et al., 1973-74).

Empirical studies have consistently documented the existence of at least two or three gratification dimensions. Lasswell (1948) first suggested, on a macro-sociological level, three functions that the communication process performs in society. He postulated that the media served the functions of surveillance, correlation, and transmission of the social heritage. Wright (1960) developed these functions on both the macro- and micro-sociological levels. He elaborated on the meaning of transmission of cultural heritage to include "socialization" for the society as a whole and individuals and subgroups in society. Wright also added a fourth function, entertainment.

Later, McQuail, Blumler, and Brown (1972) put forward a typology consisting of four categories. They were, diversion (including escape from the constraints of routine and the burdens of problems, and emotional release); personal relationships (including companionship and social utility); personal identity (including personal reference, reality exploration, and value reinforcement); and surveillance.

Katz, Gurevitch, and Haas (1973) found that gratifications could be clustered into two categories. The first group included those associated with maintaining ties with society and the state. The second cluster related to "self-indulgence" needs. Individuals could do this via instrumental, affective, or integrative relations with different kinds of other (self, family, friends, nation, etc).

Towers (1986) examined uses and gratifications of magazine readers and divided gratifications to fit into three broad groups of interaction, surveillance, and diversion to predict the uses of news and consumer magazines. He also suggested the need for future researchers to explore whether special interest magazines would add to the understanding of gratifications related to media.

More recently, Payne, Severn, and Dozier (1988) contended that uses and gratifications research exclusively related to magazines was sparse. They divided user motivation into three elements: environmental surveillance, environmental diversion, and environmental interaction to accommodate trade and consumer magazines. Their study extended the link of the interaction, surveillance, and diversion typologies to trade magazines--a publication category not previously linked to such uses and gratifications research. They concluded that uses of particular media types can be predicted from the content of a medium. For example, readers of trade magazines scored higher on environmental interaction, and on environmental surveillance scales than readers of consumer magazines. The idea employed by Payne et al. (1988) could again be extended to study a special interest computer magazine and its readers and find whether uses of a specialized computer magazine can be predicted from its content.

Becker (1980) reviewed studies on gratifications sought from political and nonpolitical messages. His study on nonpolitical gratifications sought by newspaper readers could be utilized to conduct a parallel study on computer magazine readers as well. For nonpolitical gratifications, four factors emerged in Becker's study: general surveillance, interpersonal contact, entertainment and time passing, and advertising. Becker conducted a readership study in 1975 of a metropolitan newspaper market in the northeastern part of the United States where newspaper readers, in a probability sample, were asked in person to indicate to what extent 14 listed reasons for seeking gratifications applied to them. All these statements of reasons fell under one of the four categories of gratifications specified above. They were (1) surveillance (or information) and guidance--to keep up with the latest events, to determine what is important, to obtain useful information, to help form opinions about things going on around, to help make decisions on issues, to understand what's going on around; (2) entertainment--just to pass time, to be entertained; (3) reinforcement and communicatory utility--to give something to talk about with other people, to use in discussions with friends, to agree with editorial and magazine stands, to strengthen arguments on issues, to feel that reader is participating in current events; (4) advertisements--for information on advertisements.

A pattern of mean scores of the results revealed that surveillance and guidance items (items 1-6) received high endorsements. Reinforcement and communicatory utility items (items 9-13) were endorsed less often. The entertainment items (items 7 and 8) and the items on advertising (item 14) were also checked less often than the surveillance and guidance items (refer to Table 1). Entries shown in the table are means and standard deviations. A high score indicates the reason for reading a newspaper applies to the respondents. Thus, Becker was able to find out which type of non-political gratifications the newspaper readers sought, and also which type

of gratification from among these the readers sought more. If Becker's four gratification categories and the statements of gratifications within them were used in a study of readers of a computer magazine, it would be possible to find which gratifications readers seek more of from the magazine. This information would also enable the researcher to conclude whether the uses of that computer magazine could be predicted from the content of the magazine. This would link prior findings from uses and gratifications research to research on computer magazines.

Table 1: Levels of Nonpolitical Gratification, 1975 Northeastern Newspaper Audience Survey

Gratifications	Newspaper Readers	
	Means	Standard deviation
1. To keep up with the latest events	2.70	.51
2. To determine what is important	2.32	.72
3. To obtain useful information for daily life	2.34	.70
4. To help me form opinions about things going on around me	2.38	.68
5. To help me make decisions on issues	2.09	.75
6. To understand what's going on	2.53	.59
7. Just to pass time	1.63	.75
8. To be entertained	2.04	.75
9. To give me something to talk about with other people	2.09	.76
10. To use in discussions with my friends	2.08	.76
11. Because I agree with editorial stands	1.53	.63
12. To strengthen my arguments on issues	1.97	.74
13. To feel I am participating in current events	2.07	.78
14. For information in advertisements	1.71	.77

$n = 638$

Note: The data in Table 1 are from "Measurement of Media Gratifications" by L.B. Becker, 1980, Mass Communication Review Yearbook 1. Copyright 1980 by Beverly Hills, CA: Sage.

Chapter 3

SHAREWARE MAGAZINE

Shareware Magazine is a special interest, bi-monthly periodical for IBM PC and compatible users. It was introduced as a newsletter called PC-SIG News in January 1986 and was renamed Shareware Magazine in January 1988. The magazine runs an average of 50 pages, with a page size of 8 ½" X 11" and sells at a cover price of \$2.95. According to Manning (1990), Shareware's annual subscription price is \$20, and the magazine's circulation is close to 100,000, of which 30,000 are subscribers and the rest are buyers off the newstands. Individuals as well as companies and organizations subscribe to Shareware. Some sample pages of the November-December 1990 issue of the publication are attached in Appendix 1.

An examination of the 1990 Gale Directory of Publications and Broadcast Media revealed that circulation figures of the listed computer publications vary from a few hundreds to as many as 500,000 readers. Therefore, with a circulation of 100,000, Shareware can be considered to be a mid-sized magazine in the specialized field of computer magazines.

PC-SIG, Inc. publishes Shareware Magazine. The company is a commercial outlet based in Sunnyvale, California that sells PC-based shareware software. The shareware slogan is "try before you buy." "Shareware" is a software marketing system where rather than sell through stores, shareware software is distributed directly to users who try the program for free and pass it along. Users who like the software and continue using it are required to pay a

registration fee directly to the author. As marketing costs are eliminated, shareware is usually cheaper than the commercial software. Shareware Magazine is a narrowly focused magazine distinguishing itself as the magazine that provides information on shareware software.

According to information provided by the advertising department of PC-SIG, Inc., almost all Shareware readers are male, well-educated, and from a high income group. More than 80% of the magazine readers are at least 35 years old, and more than 75% of the readers have an annual household income in excess of \$40,000 and above. Some 90% of the readership is male, and 60% have at least a college degree. Over 85% of the readers consider themselves to be intermediate-level or advanced computer users, and the readers are widely scattered all over the U.S. PC-SIG, Inc. obtained this information from replies to questions sent in by about 2% of the readers. They were not scientifically controlled surveys.

As a means of comparison, results of a demographic study of over 22 million personal computer owners in the U.S. were obtained from Simmons 1987 Study of Media and Markets. These figures showed that only 49% personal computer owners were male. Some 60% personal computer owners were 35 years or older, and 30% had at least a college degree. Only about 46% personal computer owners had an annual household income in excess of \$40,000.

Manning (1990) described Shareware as "the only periodical specifically aimed at making consumers aware of low cost software" (p. 283). An examination of issues of the magazine shows that it covers the latest industry trends, news, and issues affecting computer users. It has new-disk listings, informative and entertainment articles on software in the form of feature stories which address the shareware software industry. Shareware also contains tips for professionals and beginners, in-depth reviews of programs, and other shareware/computer related pieces.

This periodical aims to provide information in simple language with a minimum use of jargon so readers at different levels of expertise can understand the contents. The magazine strives to maintain contact with its readers and encourages readers' response through letters.

Shareware advertises for shareware software programs. There are advertisements for PC-SIG, Inc. products like CD ROMs and video programs. Aside from these advertisements, there is a classified section that runs advertisements for personal computer related material such as software and hardware items, books, directories, games, services for repairs, and opportunities for work.

Chapter 4

SETTING FOR THE STUDY

This study will attempt to answer two questions: The first is similar to the Becker (1980) study--"Do Shareware readers seek more of a certain type of gratification from the magazine?" And the second question is, "Do Shareware readers read material in the magazine which they perceive to satisfy the gratifications they are seeking?" To answer the first question, it is necessary to ask readers what needs they seek to satisfy by reading Shareware. To answer the second question requires finding out what articles/sections the readers read in Shareware, and what gratifications they seek from them. As noted earlier in the section on "Typologies of Media Gratifications," recall that Becker addressed the issue of typologies of nonpolitical gratifications and listed 14 questions that asked newspaper readers what gratifications they sought from reading the newspaper (Becker, 1980). These were placed into four groups: surveillance (or information) and guidance, reinforcement and communicatory utility, entertainment, and for advertisements. Recall again that Becker, in his study, found that surveillance and guidance items received higher endorsements than any of the other three categories of gratifications. The first question will attempt to discover whether Shareware readers endorse the surveillance and guidance category similarly.

The second question is designed to find out whether people read certain material in the magazine if they believe it to satisfy a particular gratification they are seeking. For example, if readers do seek more gratification in the surveillance and guidance category, then they will read material in Shareware which they feel satisfies their surveillance and guidance needs.

This study will also collect demographic information to enable comparison and generalization with other studies of computer magazines that might be conducted in the future and to enable comparison and contrast among Shareware readers themselves. The study will also question respondents briefly about their acquaintance with Shareware.

HYPOTHESES

Hypothesis 1: Shareware readers are more likely to seek gratifications in category (1) surveillance and guidance, than they are in categories (2) reinforcement and communicatory utility, (3) entertainment, or (4) for information in advertisements.

Individuals who read Shareware will perceive the magazine to satisfy at least one of the needs in the above-mentioned categories. The readers should be reading Shareware for at least one of the following reasons: (1) to keep up with the latest events in the shareware field, (2) to determine what is important in shareware field, (3) to obtain useful information in shareware field, (4) to help me form opinions about things going on in shareware field, (5) to help me make decisions on shareware issues, (6) to understand what is going on in shareware field, (7) just to pass time, (8) to be entertained, (9) to give me something to talk about on the subject with other people, (10) to use in discussions about shareware with my friends, (11) because I agree with stands taken in the magazine reviews and editorial, (12) to strengthen my arguments, (13) to feel I am participating in current events in the shareware field, or (14) for information in advertisements.

The expectation here is that if Becker's (1980) study conclusions hold good for Shareware readers, then more readers will seek gratifications in the surveillance and

guidance category than in any other category. That is, more readers will seek gratifications to satisfy reasons 1-6 (information and guidance) above, than for reasons 7 and 8 (entertainment), or for 9-13 (reinforcement and communicatory utility), or for reason 14 (advertisements).

Hypothesis 2: The more readers seek gratifications in a particular category, the more they read material in Shareware that they perceive to supply information in that category.

The expectation in Hypothesis 2 is that if the readers seek more gratifications in a particular category, then they seek to satisfy the gratifications in that category by reading material in Shareware that they perceive will help satisfy those gratifications.

Readers will be provided a list of titles (Program Reviews, Classified Ads, Feature Stories etc.) from Shareware and asked to rank the titles in their order of importance to themselves. Then the readers will be provided Becker's list of gratifications. These will be grouped category wise as (A) information and guidance, (B) entertainment, (C) reinforcement and communicatory utility, and (D) advertisements and the readers will be asked to write against each title, the name of the gratification category that best suits each title in their opinion.

Thus, readers who seek more gratifications from a certain category will find those titles important which they perceive to satisfy the gratifications they seek. Asking the readers to write a category of gratification that best suits each title will indicate what gratification they seek from each particular title. It is expected that more readers will read material in Shareware that they perceive satisfies their information and guidance needs. Also, those who seek gratifications in categories B, C, or D should select material that satisfies their needs in those categories.

Chapter 5

METHODOLOGY

STUDY DESIGN AND DATA COLLECTION

The primary goal of this survey is to contribute to academic knowledge. It would, of course, be an added advantage if the results could be of some value to the Shareware staff. A mail survey was used to contact Shareware readers across the U.S. so that the study did not concentrate on selected regions of the country. As Shareware readers were widely scattered across the country, personal interview surveys were not possible. Also, the contents of the questionnaire made it difficult to collect information through telephone surveys. A mail survey seemed appropriate because a national mail survey would cost no more than a local one, and it could be administered by the researcher alone.

Babbie (1989), explained on the weaknesses of survey research and wrote, one, that there was no control on the number of questionnaires that would be returned. Two, that incomplete questionnaires might be returned. Three, that only questions requiring simple answers had to be asked. Finally, that no observations could be made about the respondents (for example, their appearances, moods) other than conclusions drawn from the replies.

PC-SIG, Inc. generated and provided a computerized random sample of 400 subscribers from the Shareware mailing list. A questionnaire with a cover letter (on Shareware letterhead)

was mailed to the subscribers on this list. The mailing was paid for and done by the researcher, and the cover letter was signed by both the researcher and the Shareware editor. The cover letter, questionnaire, and a page containing information to be filled in by the respondents about which free software disk they wanted are in Appendix 2.

The nature of a mail survey is such that the researcher has little control on whether a respondent would fill and return the questionnaire. In an attempt, therefore, to increase the response rate a self-addressed stamped envelope was enclosed with the questionnaire and the cover letter. PC-SIG, Inc. also offered to send a free software disk of the respondents' choice if they completed the 12-item questionnaire and returned it to the researcher. The questionnaire should have taken respondents about 10-15 minutes to complete. The questionnaire was accompanied by a cover letter and a self-addressed stamped envelope. There was one 5-point Likert scale type question with a list of 14 items below it, one question with a list of 11 items to be ranked, and one question which required matching a best fit category to each item on a list. The two questions on age and occupation were designed as open-ended questions. The researcher intended to group the ages into categories before coding them. The question on occupation was open-ended so as to obtain a brief, overall idea about the readers. It would not be coded. The rest of the seven questions were designed as fixed-choice to avoid ambiguity.

To ensure that the sample of 400 readers were not confused, the researcher used the words "SHAREWARE Magazine" in the questionnaire instead of "Shareware" as used elsewhere in this research paper.

There was a separate page at the end of the questionnaire. This page contained blank spaces for filling in the name and address of the respondent and space for filling in which

software disk the respondent wanted sent free from PC-SIG, Inc. This page was separated upon receipt of completed questionnaire and handed over to PC-SIG, Inc. by the researcher. Thus, the filled questionnaire sheets were not seen by anyone at PC-SIG, Inc.

Prior to the mailing, the questionnaire was submitted to the publisher and to the editor of Shareware. The researcher had them review the questionnaire only because they could better gauge whether Shareware readers would understand the questions. They did not influence the questionnaire by biasing the questions or imposing constraints on the contents. Following their review, some changes were made to clarify the meaning of some questions. The questionnaire was not pretested as it seemed to be simple and clear for Shareware readers.

The mailing was conducted on March 2, 1990 by the researcher and all 400 questionnaires were mailed in one day. A total of 225 replies (a response rate of 56.25%) were received by April 2, 1990. The expense of conducting a second mailing would have been too expensive for the researcher. Therefore, as the response was more than 50%, it was not considered necessary to follow up with a second mailing.

DATA ANALYSIS

Hypothesis 1, is tested by determining the means of the 14 items, on a 5-point apply-not apply Likert type scale that contains reasons for reading Shareware. The mean scores of the four gratification categories (information and guidance, entertainment, reinforcement and communicatory utility, and advertisements) are calculated to indicate which gratification category the readers seek most of. A dependent t test is applied to the mean scores to find out whether or not there is a significant difference between the gratifications sought from the information and guidance category and the entertainment, reinforcement and communicatory utility, or the advertisement categories. This indicates whether more readers seek gratifications in the information and guidance category than they do in any other category. The results would, in turn, indicate whether Becker's (1980) study conclusions of non-political newspaper readers are similar to the study of Shareware readers.

To test Hypothesis 2, the importance of each category, (A) information and guidance, (B) entertainment, (C) reinforcement and communicatory utility, and (D) advertisements for reading Shareware had to be assessed. Therefore, each subject's reading preference rating is correlated with each of the category scores.

According to Weinbach and Grinnel (1987), the closer the numerical value of the correlation coefficient is to either extreme (1.0 or -1.0), the stronger the relationship between the two variables. The closer the coefficient is to the middle of the continuum (0.0), the weaker the relationship between the two variables. In the case of testing Hypothesis 2, a large positive correlation between category scores and reading preference for a given item would indicate that those for whom this category is important, seek gratification by reading the particular item.

Therefore, the closer the correlation figures are to 1.0, the more important the factors would be in determining preference for an article or section in Shareware. Thus, these correlations between preference ratings and category scores serve as an index of the importance of each of the categories in determining the preference for each of the article types. This would provide some answers to the question whether Shareware readers read material in the magazine which they perceive to satisfy the gratifications they are seeking.

CHAPTER 6

RESULTS

From a sample of 400 readers, 225 Shareware subjects returned the questionnaire. All the respondents did not answer each of the questions. The number of respondents to each question varied from 199 to 225. At the time of data analysis the questionnaire was broken down into four sections to simplify explanation and make it easier to digest the results. The most important parts of the questionnaire are the questions dealing with the hypotheses statements, and these are discussed first.

Data relevant to Hypothesis 1 are explained in the first section called "Gratifications from Shareware." Question 5 of the 12-item questionnaire determined the reasons why the subjects read Shareware and which of the four gratification categories they sought more of. It is here that Hypothesis 1 was tested.

Data pertaining to Hypothesis 2 are explained next. Questions 6 and 7, were designed to test Hypothesis 2. This section collected data from the respondents on the importance of each category for reading Shareware and each subject's preference rating. This will be discussed in Section 2 under the subheading "Importance of Gratifications."

The next important section, "Demographics," was designed to provide the researcher with a demographic profile of Shareware readers. Included in this section were age, sex, education level, occupation, and annual household income. It is here that some comparisons could be

made among Shareware readers and between Shareware readers and personal computer owners. Questions 8-12 of the questionnaire are concerned with this section. This will be discussed in Section 3 under the subheading "Demographics."

And the section called "Computers and Computer Magazines" is discussed last because it contained data from questions 1-4 which were used primarily to lead the respondents gradually towards the more important questions discussed in the earlier sections. Questions 1-4 determined the familiarity of the readers with Shareware and with other computer magazines. It asked how much and for how long the readers had been reading the magazine, where they used personal computers, and the number of computer magazines read.

GRATIFICATIONS FROM SHAREWARE

The data collected in question 5 (a Likert type apply-not apply scale) demonstrated the various reasons for which the respondents read Shareware, and which gratification category they sought more of from among (1) information and guidance; (2) entertainment; (3) reinforcement and communicatory utility; (4) advertisements. Table 2 at the end of this section illustrates in percentages, the number of readers who read Shareware to derive the different types of gratifications. Statements 1-6 belong to the information and guidance category, statements 7 and 8 belong to the entertainment category, statements 9-13 belong to the reinforcement and communicatory utility category, and statement 14 is the advertisement category. Table 2 showed at a glance that the information and guidance category

(i.e., statements 1-6) had an overall higher percentage of readers in sections A and B than the other categories did. Therefore, it appeared that more readers believed they sought more gratifications from the information and guidance category than they did from the other categories.

The above conclusions were further reinforced when the means of the four gratification categories were determined, and the mean scores of the four were as follows: (1) information and guidance was 2.1, (2) entertainment was 3.7, (3) reinforcement and communicatory utility was 3.5, and (4) advertisements was 2.3. In this case, a lower mean score indicated that the readers found that particular category more applicable in satisfying the gratifications they sought.

A dependent t test was then applied to these mean scores to compare the information and guidance category with each of the other three categories (refer to Table 3 at the end of this section). The results indicated that there was a significant difference between the gratifications sought from the information and guidance category and the other three categories. When the information and guidance category was compared with entertainment or with reinforcement and communicatory utility, results showed that there was a probability of less than one chance in a thousand that the differences had occurred by coincidence. And a comparison of the t values of the information and guidance category with advertisements revealed a probability of four chances in a thousand that this difference was an occurrence of chance. The researcher, therefore, concluded that more Shareware readers seek gratifications in the information and guidance category than they do in any other category.

As discussed earlier, Becker's study of newspaper readers for nonpolitical gratifications had revealed that information and guidance was the category that was endorsed most often. Reinforcement and communicatory utility, entertainment, and advertisements were all checked less often than information and guidance.

This section of the survey was designed to find out whether Shareware readers seek more of a particular category of gratifications as compared to other categories. Specifically, Hypothesis 1, that Shareware readers seek more gratifications in category (1) information and guidance, than they do in categories (2) reinforcement and communicatory utility, (3) entertainment, or (4) for information in advertisements. The results of the data collected and illustrated in Table 2 and the data from the dependent t test displayed in Table 3 indicate that, in fact, Shareware readers did seek more gratifications in the information and guidance category than they did in others. Thus, the data provided overwhelmingly support Hypothesis 1. These results were similar to the results of the Becker (1980) study of newspaper readers for nonpolitical gratifications where readers sought more gratification in the information and guidance category than they did in others.

The researcher observed that readers of Shareware scored far higher on the information and guidance gratifications than on the other categories. This led to the conclusion that if the contents of other computer magazines were similar to Shareware, studies could be conducted to predict whether readers of those magazines too scored higher on the information and guidance category. Thus, a use-content relationship is applicable to computer magazines, an extension of uses and gratifications research to include special interest computer magazines.

Table 2: Table illustrating the percentage of readers who read Shareware to derive the different kinds of gratification

A = Absolutely applies, B = Applies, C = Uncertain, D = Does not apply, E = Absolutely does not apply

Statements	A	B	C	D	E
1.To keep up with the latest events in the shareware field	42	48	5	4	1
2.To determine what is important in shareware field	21	51	17	9	2
3.To obtain useful information in shareware field	39	55	2	3	1
4.To help me form opinions about things going on in shareware field	15	51	20	12	2
5.To help me make decisions on shareware field	23	38	23	13	3
6.To understand what is going on in shareware field	15	58	14	10	3
7.Just to pass time	4	11	6	39	40
8.To be entertained	5	27	13	29	26
9.To give me something to talk about on the subject with other people	4	18	13	34	31
10.To use in discussions about shareware with my friends	7	27	13	29	24
11.Because I agree with stands taken in the magazine reviews and editorial	4	15	35	30	16
12.To strengthen my arguments	4	8	24	35	29
13.To feel I am participating in current events in the shareware field	6	26	22	29	17
14.For information in advertisements	15	53	18	11	3

Table 3: Table illustrating comparison of mean scores of three gratification categories with the information and guidance category and results of the dependent t test

	Mean	Standard deviation	t value	two-tailed probability
information and guidance	2.12			
entertainment	3.73	1.26	18.76	<.001
information and guidance	2.12			
reinforcement and communicatory utility	3.48	.87	22.83	<.001
information and guidance	2.12			
advertisements	2.34	1.10	2.92	.004

$n = 214$

Note: A lower mean score indicates that a particular category has higher applicability in satisfying gratifications sought by readers.

IMPORTANCE OF GRATIFICATIONS

This section sought to assess the importance of each category of gratifications for reading Shareware. For this, the readers' reading preference ratings were correlated with each of the category scores. A large positive correlation between category scores and reading preference would indicate that those for whom a category was important sought gratification by reading the particular item. These correlations between preference ratings and category scores would serve as an index of the importance of each of the categories in determining the preference for each of the article types.

This section was designed to test Hypothesis 2, that is, the more a reader seeks gratifications in a particular category, the more he reads material in Shareware that he perceives to supply information in that category. As only a weak correlation could be detected in the data collected, the researcher's study did not reflect the hypothesized statement.

As explained earlier in the section on Data Analysis, to indicate a positive correlation of any kind between the preference ratings and category scores, a correlation score between 1.0 and .50 would be required. A study of the correlations indicated that some of the highest figures obtained were only .28, .27, and .16. These figures were very close to the middle of the continuum (0.0) which indicates no correlation. Therefore, there was an extremely weak correlation between the readers' reading preference and the category scores.

However, a comparison of the means of the data collected in question 7 indicated that most respondents derived gratifications from the information and guidance category. In fact,

information and guidance was the primary reason for reading most of the sections/titles. This pointed to the fact that most respondents were reading Shareware for information and guidance. The researcher found that 97% of the readers reading "Program Reviews" said they read for information and guidance. Around 60% read "Letters to the Editor" for information and guidance and 30% said they read it for entertainment. Some 85% of the readers read "Shareware Best Sellers" and 74% read "User's Exchange" for information and guidance. "Feature Stories" was read by 69% of the respondents for information and guidance while 25% were reading that section for entertainment. Some 93% read "New Shareware Programs" while 86% read "Just Released" for information and guidance. And 57% read "Publisher's Column" for information and guidance and 29% read it for entertainment.

However, the comparative study of the means indicated that not all the sections/titles were read primarily for information and guidance. Data showed that excluding the sections, "Display Ads," "Classified Ads," and "Ask Dr. Science," all other sections showed a significant majority of readers reading the sections for information and guidance. The primary reason for reading "Ask Dr. Science" was entertainment. Around 50% of the readers read it for entertainment while only 31% read it for information and guidance. Similarly, 51% readers said they read "Classified Ads" and 58% read "Display Ads" for information in advertisements while only 32% of the readers read both those sections for information and guidance.

DEMOGRAPHICS

Questions 8-12 provided data on the demographic information of Shareware readers. The demographic data collected by the researcher produced similar results as the information that had been provided by PC-SIG, Inc (as discussed in the section on "Shareware Magazine"). The researcher found that 86% of the respondents were male, 80% respondents were over 35 years old, some 76% had at least a college graduate degree, and that 73% had an annual household income of over \$40,001. As will be elaborated in the next section, "Personal Computers and Computer Magazines," more than 77% of Shareware readers use personal computers at both home and at work and an additional 17% use PCs only at home. This means that many Shareware readers own personal computers. Thus it is possible to make some comparisons between the demographics of personal computer owners and of Shareware readers.

A comparison of the figures from Simmons 1987 Study of Media and Markets of computer owners with those of Shareware readers reveals that Shareware readers have a much higher ratio of male readers, a far greater percentage of readers with a college degree, a larger percentage of readers who are 35 years or older, and a very high ratio of readers with an annual income of \$40,000 or more.

Payne et al. (1988) found in their study of the use-content relationships of trade magazines that demographic variables appeared to be largely unrelated to motives as predictors of publication selection. On the other hand, Shareware readers appear to demographically portray only a small section of the U.S. society. It is possible to conclude from

this observation that the magazine's demographic profile is related to the media use motives and content of Shareware magazine.

When Shareware readers' ages were divided into three groups (19-39 years old, 40-49 years old, and 50 years and older), the researcher noted that there were 85% or more male respondents in each of the three groups. Over 70% of the respondents in each age group had at least a college graduate degree. And over 60% in each age group had an annual household income of \$40,001 or above.

The researcher also noted that among the respondents, men were more likely to be better educated than women. The data indicated that 76% of the men had at least a college graduate degree as compared to only 59% of the women.

When the researcher grouped the annual income into three levels (up to \$40,000 , \$40,001-\$80,000, \$80,001 and over), there did not appear to be a significant difference in the income levels among the men and women. While 26% of men were in the up to \$40,000 income group, there were 35% women in the group. Some 54% of the men and 45% of the women were in the \$40,001-\$80,000 income group. And there were 20% men and 21% women in the \$80,001 and above income group.

When the education level was divided into two groups (those without a college degree and those with at least a college degree), the researcher observed that with an increase in the level of education there was a significant increase in the level of income. In the group with an annual income of up to \$40,000, only 20% had at least a college degree while 47% did not have a college degree. In the group with an annual income of between \$40,001-\$80,000, only

57% had at least a college degree while 40% did not have a college degree. In the group with an annual income of between \$80,001 and above, 23% had at least a college degree while only 14% did not have a college degree.

The question on occupation was asked only to get an overall idea about the readers. The replies received were all varied and it would have been possible to group them in broad categories only--which was not necessary for this study. Therefore, the data collected on this question was not coded. In general, however, almost all the readers held white collar jobs. They held positions such as doctors, engineers, lawyers, real estate agents, nurses, professors, computer analysts, and so forth. There were some students and retired individuals.

PERSONAL COMPUTERS AND COMPUTER MAGAZINES

Questions 1-4 of the questionnaire were designed to establish a general idea of where readers use personal computers and of the readers' computer magazine reading habits. These questions were placed in the beginning so as to gradually lead the respondents towards the more important questions where the hypotheses were tested.

If similar questions were asked of other computer magazine readers in future, it could provide information on similar trends among such publications. Such information might be used to make generalizations about the field of computer magazines and what the reading habits and preferences of computer magazine readers are, thus adding to the available literature on this subject. On the other hand, research might demonstrate dissimilarities among reading habits and preferences of different computer magazine readers. Such information could then be used to find out the reasons for such differences.

In the first question, respondents were asked where they used a personal computer. In answer to this question, 17% said "only home," 3% said "only work," 77% said "both home and work," and 2% said "elsewhere" and specified it as school. The researcher concluded that over three-fourths of the respondents were using personal computers at both home and work. Also, the number of PC users at home showed that more than three-fourths of the respondents owned PCs.

The second survey question asked, "Other than Shareware, how many computer related magazines do you subscribe to?" Replying to this question, 13% said "none," 11% said "one," 25% said "two," 21% said "three," 9% said "four," and 21% said "five or more." The researcher

found that over half of the respondents were subscribing to three or more computer-related magazines. Only 13% of the respondents were subscribing to Shareware alone. On an average, the readers read about three computer related magazines besides Shareware. This shed light on the fact that a majority of Shareware subscribers were special interest computer magazine readers.

The third question in this section was, "PC-SIG, Inc. began publishing Shareware in January 1988. How many months have you been reading the magazine?" In reply to this question, 17% said "less than 6 months," 18% said "7-12 months," 25% said "13-18 months," and 40% said "19-24 months." Significantly, 40% of the respondents said they had been reading Shareware for a period of 19-24 months. Only about 17% of the respondents had been reading it for less than 6 months. Here, the researcher found that a large portion of the respondents continued to read Shareware because they derived certain gratifications from it

The last question in this section asked, "On an average, approximately, what percentage of an issue of Shareware do you read? (This includes all articles, columns, advertisements, letters, and so forth)." In answer to this query, 5% respondents said less than 20%, 22% said 21-40%, 29% said 41-60%, 30% said 61-80%, and 14% said 81-100%. These figures also showed that a majority of the subscribers read a substantial portion of the magazine content because they derived certain gratifications from it. Almost 45% of those who responded said they were reading over 60% of the magazine and 29% were reading between 41-60% of the magazine.

Chapter 7

SUMMARY AND CONCLUSIONS

The number of specialized computer magazines available in the U.S. market has shown a healthy growth in the last decade. The purpose of this study was to contribute to academic knowledge available in the field of computer periodicals and to provide another link between the magazine media world and uses and gratifications research. To achieve this, the researcher focused on one computer magazine --Shareware-- and explored the different types of gratifications people sought from reading the magazine, and how important these gratifications were to them.

This study contributed to the uses and gratifications field by providing some new information on gratifications sought by readers of a computer magazine. Also, such knowledge could be valuable for the publishers and managers of Shareware in developing editorial policy and helping with magazine management. Information obtained from the study was used by Shareware managers to draw a readers' profile. This material is useful information for Shareware advertisers and could be of value in attracting new advertisers to the publication. Shareware editors could also mold the publication more towards satisfying the needs of their readers, based upon information on gratifications sought by these readers.

The following sections in this chapter contain a summary of the findings in the study and some limitations of this project. A few recommendations are also offered to help future researchers who might wish to conduct studies of a similar nature.

Summary

The study supported Hypothesis 1, confirming that more Shareware readers read material to satisfy their information and guidance needs than they do their needs for reinforcement and communicatory utility, entertainment, or information in advertisements. These results were similar to the Becker (1980) study of nonpolitical newspaper readers where more readers of nonpolitical news sought to satisfy their information and guidance needs.

On the other hand, the study did not support Hypothesis 2. A very weak correlation could be found empirically showing that the more Shareware readers sought gratification in a certain category, the more they read material in Shareware that they perceived would supply information in that category. The data collected could not provide an index of the importance of each of the categories in determining the preference for reading each of the sections/titles in Shareware.

The demographic data showed a typical Shareware reader to be male, over 35 years old, with at least a college degree, and having an annual household income of \$40,000 or more. Since demographic data on computer magazine readers was unavailable, the Shareware data was compared with a Simmons 1987 Study of Media & Markets demographic survey of personal computer owners. It showed that Shareware readers differed considerably from personal computer owners despite the fact that a large majority of Shareware readers used personal computers at home. Therefore, the researcher concluded that only a certain type of computer using person reads Shareware because of its specialized content.

Some information was also collected on the computer magazine reading habits and personal computer use of Shareware readers. As expected, the researcher discovered that a

majority of Shareware readers were personal computer users at both home and work, and that most of them were special interest computer magazine readers who read other computer magazines besides Shareware. Shareware readers had a high degree of involvement with the magazine. For example, 40% readers had been reading the publication for 19-24 months and almost half the readers read more than 60% of the publication.

Limitations

Shareware has a mid-sized circulation among computer magazines. Also, its readers are scattered all over the U.S. Therefore, Shareware could be considered as a typical computer magazine. However, the demographics obtained points out that, on an average, Shareware has a very high number of male readers; that readers are highly educated, belong to a high-income category, and are over 35 years old. Therefore, Shareware readers comprise of only a narrow section of the U.S. society. However, the scope of this study did not let the researcher conclude whether Shareware readers are typical computer magazine readers.

This study replicated the Becker (1980) study by using Becker's gratification categories and the statements of gratifications within them. However, no additional analysis was conducted to validate whether the items within each category as used by Becker would reappear in the researcher's study of gratifications sought by computer magazine readers.

The study could draw conclusions about the demographic characteristics of Shareware readers only. To compare and generalize the results, the researcher was not successful in obtaining general demographic information on computer magazine readers from the available body of literature on computer magazines. Therefore, this data of Shareware readers had to be compared with those from a demographic study of home computer owners.

Although the response rate of the mail survey was over 56%, a second mailing of the questionnaire would have been considered more adequate to judge the results of the study. A few replies were coming in every day even after three weeks of the first mailing, and the response rate was very close to 50%. Therefore, it was decided that a second mailing would not be necessary. This decision was made after considering both the response rate already obtained and the additional expense that would be incurred if a second set of questionnaires along with reminders were to be mailed.

There was a problem in the questionnaire with the open-ended question on occupation of readers. The wording of the responses to the question were misleading sometimes as the respondents could have held similar work positions but have used different job titles to describe them. For example, titles such as "computer analyst" and "computer consultant" could be two different names for the same job description in two different organizations. The titles "laboratory specialist" and "technician" could mean one and the same thing, but it would be difficult to ascertain this from the available data. It was, therefore, not possible for the researcher to group the replies accurately.

Recommendations

Future research should include the study of other computer magazines to compare and contrast information on demographics of readers, readers' computer magazine reading habits, readers' PC use habits, and so forth. Studies of other computer magazines could lead to use-content generalizations for these magazines as has been demonstrated by earlier studies of consumer and trade magazines. Studies could also allow researchers to find whether demographic variables are affected by media use motives and content of these magazines. This

is a study of only one specific computer periodical -- Shareware. If more such information were collected from other computer periodicals, it might increase knowledge on computer magazine readers in general. Such data could contribute to knowledge on the uses sought from special interest computer magazines and thus, strengthen the ties between uses and gratifications theory and research on special interest computer magazines.

Studies could also be conducted to compare computer magazines with other special interest magazines. If, along with demographic studies, psychographic information on computer magazine readers were included, some light could be shed on their lifestyles and habits. This might provide a more complete picture on the general profile of a computer magazine reader.

Researchers who might conduct similar studies in future should be aware that a mail survey does not guarantee a good response rate. The researcher might have received, with only one mailing, a response rate of over 50% for several reasons. The questionnaire looked short and simple to answer. Shareware readers are well educated and highly involved with the magazine, and they were probably interested in the results of a study about the publication. The incentive that respondents would receive a free shareware disk also appears to have worked.

In this particular study, the open-ended question on the occupation of readers did not work. There are a lot of job categories and titles in use today, and it is difficult to get a precise answer so as to aggregate the data into categories later. It might, therefore, be better to provide close-ended questions and have the respondents decide into which group they fit best, if future researchers wish to collect similar occupation related data.

As compared with the newspaper and broadcast media, there has so far been less emphasis on magazine media research. At the same time, special interest magazines have

become popular and abundant in the last few decades. These publications, therefore, provide a hunting ground to future researchers for further academic research. Specialized publications depend on the tastes, demands, and loyalty of their readers. Therefore, research in this field might be of dual value. Not only might it contribute to the available body of academic knowledge, but it might also help the magazine staff (or people attempting to publish new magazines) understand the requirements of their readers better and the factors instrumental in stimulating the interests of these readers. Such information could help magazine publishers predict changes in peoples' reading interests and help with focusing the contents of their publications. As a result, magazine readers might, in future, be able to pick from more satisfactory, improved publications. And magazine publishers could pursue the business of satisfying the needs of their consumers more aggressively.

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APPENDIX 1

SAMPLE PAGES FROM SHAREWARE

MAGAZINE

Quality Software

\$2.95/Canada

SANTA'S HELPERS

Timesaving Holiday Software

Shareware Gift Guide

Latest Releases in Low Cost Software

New Column

Finder's Software Clinic

CONTENTS

VOL. VI NO. 6
NOV. DEC. 1990

'Tis the season for planning parties, sending cards, deciding on gifts, and cooking for crowds. The right software will help you wrap up holiday plans.

Let software show its Christmas presence. Turn to page 10 for tips on . . .

Surviving the Holidays With Shareware

FEATURES

HOLIDAYS

- 12 Alternatives to Fruitcake
Gift ideas for the computer user who's been very good this year.

BOOKS

- 14 Dr. File Finder's Personal Picks
Hot shareware suggestions from the software expert.

BIBLE STUDY

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Find out what you get when you cross technology with theology.

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51 Classified Ads

SHAREWARE

Editor

Marilyn Young

Art Director

Dave Titus

Production Assistant

Joe Speaks

Graphic Designer

Michael Cuman

Contributing Editors

Patrick Berry

Barry Brenesal

Mike Callahan

Jane Cross

Sherry Goldfisher

Paul Mayer

J.W. Olsen

Staff Contributors

Richard Brockus, Diane Bruch,
Michael Bruch, Bruce Kent, Steve Olson,
Ginger Otto, Helen Pulido, Veronica Pulido,
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Dennis Brookwell, Kerry Hayes,

Bruce Kent, Linda M. Marck,

Steven A. Puortenga, Margaret Stump,

Kent Thompson

Founder & Publisher

Richard Petersen

General Manager

Joe Byrd

Cover

Dave Titus

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Advertising Office

Advertising Manager, Shareware Magazine, 1030-D East Duane Ave., Sunnyvale, CA 94086. Telephone: (408) 730-9291. FAX: (408) 730-2107.

EDITOR'S NOTE

You might notice Shareware Magazine has made some changes, from the design to the editor. Like the shareware industry, we're striving for improvement and poised for growth. Look for exciting changes in this and future issues.

Beginning this month, *the* shareware expert, Dr. File Finder (a.k.a. Mike Callahan), will be writing a column (page 48) about different aspects of the shareware industry. We hope you find it a must-read. Also in this issue is an excerpt from The Doc's latest shareware book, "Dr. File Finder's Guide to Shareware" (page 14). And if you're stumped for inexpensive holiday gift ideas (and who isn't?), look no further than our Shareware Gift Guide on page 12.

One question we've been thinking about lately is how shareware is being used in business settings. Richard Petersen, Shareware Magazine's publisher, tackles this subject in his column (page 54). He's received such a great reader response on the subject we think it deserves more attention. Watch for articles in upcoming issues.

We want to make Shareware Magazine even better. We'd like to hear what you want to read about, how we can help you get more out of shareware, and any other comments you might have. Feel free to drop me a line at: 1030-D East Duane Avenue, Sunnyvale, CA 94086; fax us at (408) 730-2107. Or, if you're attending Comdex, Shareware Magazine will be in full force — please stop by and say hi at meeting room A11 in the Las Vegas Convention Center.

Marilyn Young

Marilyn Young
Editor

APPENDIX 2

QUESTIONNAIRE

March 1, 1990

Dear SHAREWARE Subscriber:

How would you like to receive a free shareware disk in return for answering a few questions about SHAREWARE Magazine?

I'm Nandan Dixit from the journalism department at San Jose State University. With the cooperation of PC-SIG, Inc, I'm conducting a short survey of SHAREWARE readers as part of the research for my master's thesis. As PC-SIG is interested in the results of this survey, they would like to send you a free shareware diskette of your choice from their software library as a token of appreciation. The results of the study can help PC-SIG, Inc. gear SHAREWARE more towards the needs of its readers.

You are one of a small number of readers who are being asked to give their opinion on this matter. Your name was drawn in a random sample of SHAREWARE's mailing list. In order for the results to truly represent the thinking of the readers of SHAREWARE, it is important that each questionnaire be completed and returned. A self-addressed stamped envelope is enclosed for your convenience.

You may assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so that I may check your name off the mailing list when your questionnaire is returned. Your name will not be placed on the questionnaire.

Although the aggregate results of this study will be given to PC-SIG, Inc, the individual replies will be kept with me. The last page of the questionnaire requires you to provide information on the free software disk you would like to receive. I'll give this page to PC-SIG, Inc. In this way, the confidentiality of your questionnaire will be assured.

Your participation is voluntary. Your refusal to participate will not in any way affect your rights to receive services from PC-SIG, Inc. Any questions about your participation in this study will be answered by Nandan Dixit, (415) 471-3161. Complaints about the procedures may be presented to Dr. Tillinghast (Graduate Student Advisor, Dept. of Mass Commns. and Journalism) at (408) 924-3272. For questions or complaints about research subject's rights, contact Serena Stanford, Ph.D. (Associate Academic Vice President for Graduate Studies & Research) at (408) 924-2480.

Thank you for your assistance.

Sincerely,

Nandan Dixit

Tracy Stephenson
SHAREWARE Editor

Place a check mark against your answers

1. Do you use a personal computer at

- (a) home only
- (b) work only
- (c) both, home and work
- (d) elsewhere, please specify _____

2. Other than SHAREWARE Magazine, how many computer-related magazines do you subscribe to?

- (a) none
- (b) one
- (c) two
- (d) three
- (e) four
- (f) five or more

3. PC-SIG, Inc. began publishing SHAREWARE Magazine in January 1988. How many months have you been reading the magazine?

- (a) less than 6 months
- (b) 7-12 months
- (c) 13-18 months
- (d) 19-24 months

4. On an average, approximately, what percentage of an issue of SHAREWARE Magazine do you read? (This includes all articles, columns, advertisements, letters etc).

- (a) less than 20%
- (b) 21-40%
- (c) 41-60%
- (d) 61-80%
- (e) 81-100%

5. Check either A,B,C,D, or E for how much each statement applies to why you read SHAREWARE Magazine.

A = Absolutely applies, B = Applies, C = Uncertain, D = Does not apply, E = Absolutely does not apply

Statements	A	B	C	D	E
1. To keep up with the latest events in the shareware field					
2. To determine what is important in shareware field					
3. To obtain useful information in shareware field					
4. To help me form opinions about things going on in shareware field					
5. To help me make decisions on shareware field					
6. To understand what is going on in shareware field					
7. Just to pass time					
8. To be entertained					
9. To give me something to talk about on the subject with other people					
10. To use in discussions about shareware with my friends					
11. Because I agree with stands taken in the magazine reviews and editorial					
12. To strengthen my arguments					
13. To feel I am participating in current events in the shareware field					
14. For information in advertisements					

6. Rank the following sections of the magazine in their order of importance to you--1 is most important and 11 is least important (All numbers between 1 and 11 should be used and each number may be used once.)

_____ Program Reviews	_____ New Shareware Programs
_____ Letters to the Editor	_____ Ask Dr. Science
_____ Shareware Best Sellers	_____ Just Released
_____ User's Exchange	_____ Classified Ads.
_____ Feature Stories	_____ Display Ads.
	_____ Publisher's Column

7. Mark either A,B,C, or D to explain why you read each section/title.

A = Information and guidance

B = entertainment

C = use in discussions and in reinforcing my view

D = Information on advertisements

Section/Title	A	B	C	D
Program Reviews				
Letters to the Editor				
Shareware Best Sellers				
User's Exchange				
Feature Stories				
New Shareware Programs				
Ask Dr. Science				
Just Released				
Classified Ads				
Display Ads				
Publisher's Column				

8. Your age: _____

9. _____ Male _____ Female

10. Level of education

- (a) Elementary education
- (b) Junior high school
- (c) Some High School
- (d) High School graduate
- (e) Some college
- (f) College graduate
- (g) Graduate school or professional
- (h) Ph.D.
- (i) Professional degree (law, medicine, etc.)

11. Occupation: _____

12. Gross annual income of your household (includes all members in the household):

- (a) under \$10,000
- (b) \$10,001 to \$20,000
- (c) \$20,001 to \$40,000
- (d) \$40,001 to \$60,000
- (e) \$60,001 to \$80,000
- (f) \$80,001 to \$100,000
- (g) \$100,001 and over

THIS PAGE IS FOR PC-SIG, INC.

Please send me _____ (name of PC-SIG software disk),

Disk # _____ at the following address:

Name: _____

Address: _____