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Understanding Privacy Concerns

An Assessment of Consumers' Information-Related Knowledge and Beliefs

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ABSTRACT

The need to maximize advertising effectiveness and minimize communication costs has increased direct marketers' and packaged-goods advertisers' reliance on individual-level consumer information. The use of such information, however, has raised a number of questions regarding consumer privacy. This study therefore attempts to increase direct marketers' understanding of privacy issues by examining how well informed consumers are with respect to information gathering and use practices. The results of a regional survey of 266 adults 18 years old and older suggested: 1) privacy is an important concern; 2) many people are not very knowledgeable about specific direct marketing practices; 3) consumer concern is affected by type of practice and specificity of information; and 4) most favor restrictions on the gathering and use of personal information. Overall, the results suggest consumer ignorance may be a significant contributor to privacy concerns and that a strong commitment to consumer education may be necessary to avoid government regulation and legislation.

INTRODUCTION

Advances in computer technology, combined with economic pressures, have fundamentally altered the marketing communication practices of both direct marketers and brand/package goods advertisers. Not only does the \$55 billion spent annually on direct mail, direct response, and telemarketing now exceed combined advertising expenditures on magazines, radio, and network TV (i.e., approximately \$47.5 billion), but highly targeted, individual consumer-oriented communication models, such as "micro-marketing" (18,21) and "relationship marketing" (2) have displaced traditional mass merchandising and mass communication approaches. The desire to maximize advertising effectiveness and minimize communication costs, in turn, has escalated marketers' demand for, and reliance on, individual-level consumer information.

According to recent estimates, over 450 companies, including the three largest U.S. credit bureaus, TRW, Equifax, and Trans Union, generate most of their sales revenue by gathering and selling consumer information and data (11). A number of federal government databases, including the U.S. Census, are available to marketers as are more than 20,000 commercial ones (1,11). In terms of information technology, an increasing number of direct marketers are using relational databases or employing automatic phone number identification systems to expand the scope and breadth of their consumer databases. The former allows direct marketers to access efficiently the ever-expanding universe of internal and external consumer information sources (24), while the latter provides them with names and addresses that would otherwise be lost (4). Similarly, many brand and packaged goods advertisers have come to believe the success of their marketing communication strategies is positively related to the amount and specificity of consumer information (3). One such advertiser, Kraft General Foods, which has more than 30 food brands, has used 800/900 numbers, reply coupons, and other promotional devices to build a consumer database containing an estimated 30 million names (6). Other brand advertisers, such as Coca-Cola and Sony, not only have created consumer databases, but have used information-driven joint promotions to expand the content of their customer files (13).

While individual-level information about consumers has greatly improved marketers' market segmentation, media selection, message creation, and campaign evaluation capabilities, the desire to gather and use as much data as legally and technologically possible has raised important questions regarding how far companies can go in learning about, or attempting to persuade, consumers (8,16,22). A 1990 Louis Harris survey commissioned by Equifax, for instance, found 71 percent of the respondents believed consumers "have lost all control over how personal information about them is used by companies" (7). More recently, a 1991 Gallup survey found 78 percent of the respondents described themselves as "very concerned" or "somewhat concerned" about what marketers know about them (9). A similar level of concern was shown in a 1991 Time-CNN survey, which found 69 percent of the public was concerned about the amount of personal information collected by companies that market products, and 68 percent favored prohibiting the sale of product purchase information (11).

Not surprisingly, these findings have led a number of industry and academic leaders to identify consumer concerns related to computerized databases as issues that threaten the very foundations of direct, as well as highly targeted, marketing (17,23). Most of the discussion to date, however, has been confined to the general issue of personal "privacy"; with privacy broadly defined as the "right to be left alone if so desired" (19,26,28). More specifically, these discussions have focused on how marketers gathering and use of individual-level information "invades," or reduces, the personal privacy of consumers (15,20). This is most clearly demonstrated by Katz and Tassone's (1990) review of public opinion surveys involving information gathering and use practices. Not only did their review indicate that the percentage of Americans "very concerned" or "somewhat concerned" about privacy increased from 30 percent in 1978 to 45 percent in 1989; it also showed that surveys conducted between 1978 and 1989 primarily measured consumer sentiment regarding just four broad information issues: a) how important "privacy" was to respondents (in both relative and abstract terms); b) how concerned respondents were about "threats to personal privacy"; c) whether importance and concern

were increasing; and d) whether organizations, such as government and business, were asking for too much personal information.

PURPOSE OF THE STUDY

The relatively narrow perspective adopted by public opinion pollers, while useful for documenting growing consumer privacy concerns, has done little to increase understanding of why consumers are concerned or what practices they are concerned about. Further, and perhaps most importantly, the findings of public opinion pollers are reliable and valid only to the extent that consumers are knowledgeable and well-informed about the marketing practices they are being asked to comment upon. Unfortunately, there is little evidence that indicates how well informed consumers are with respect to direct marketers' and general advertisers' information gathering and use practices. As Schultz (1990) has pointed out, few published studies have examined the foundations of consumers' privacy concerns. The 1990 Equifax study, in fact, represented the first major study on the issue of privacy in more than a decade (7,26). The results of the study clearly showed that: a) there was widespread concern among the public with respect to personal privacy; b) there is growing concern over having to reveal personal information; c) the majority of Americans are not satisfied with the way some organizations, particularly financial and credit institutions, collect and use information about individuals; and d) consumer attitudes about direct marketers' use of individual-level information depend on their relationship with direct marketers (7). Given its relatively broad focus, however, the Equifax study did not examine the knowledge and perceptions that underlie consumer privacy and database marketing concerns. The Equifax study thus broadened the scope of the literature documenting consumer privacy concerns, but left unanswered important questions regarding: 1) how much consumers know about specific direct marketing information gathering and use practices; and 2) what consumers believe regarding the appropriateness of specific practices.

A thorough understanding of consumers' privacy concerns, however, requires a detailed exami-

nation of the knowledge and beliefs that underlie those concerns. In lieu of such research, it is impossible to distinguish ignorance-based consumer concerns from knowledge-driven consumer concerns. Therefore, the exploratory research conducted here not only examined general consumer concern regarding personal privacy, but, more importantly, extended previous efforts, including those of Equifax, by measuring consumers' information knowledge as well as obtaining their assessments regarding particular information practices. Specifically, the study provides a framework for understanding consumer privacy concerns by addressing four important sets of questions:

1. How concerned are consumers about threats to personal privacy?
2. How knowledgeable are consumers about direct marketers' information gathering and use practices? Do consumers know what information is available to marketers and advertisers? How accurate do consumers perceive the information contained in databases to be? And are they aware of the Direct Marketing Association's preference services, which provide a way for consumers to get their names removed from mail and telephone lists?
3. What specific types of information are consumers most protective of? What specific types of information gathering and use do they consider "invasive"? Is there a relationship between "ethics" and privacy concerns?
4. What, if anything, should be done about consumers' privacy and information-related concerns?

METHOD

Measurement

A five-part telephone questionnaire was developed to assess consumers' positions on the four sets of issues outlined above. The first set of questions was designed to measure, in both relative and absolute terms, respondents' general privacy concerns. To accomplish this, respondents were asked to rate on a 0-to-10 scale how important each of six social issues were to them personally. The issues (the order of which was rotated during the actual administra-

tion) included: protecting freedom of speech; making sure women have equal rights; protecting rights to personal privacy; defending freedom of the press; and cleaning up the environment. Following this, respondents were asked two questions regarding personal privacy concerns. In order to better assess the level of general concern, the wording of these questions was taken from the Equifax survey.

The second set of survey questions examined consumers' knowledge regarding the specific sources of information available for direct marketing purposes. Here, consumers were read a list of 15 potential sources (with the order rotated across respondents) of information and asked to indicate whether it was "definitely true," "probably true," "probably false," or "definitely false" that marketers or advertisers could purchase or rent the information contained in the source. The items, shown in Table 1, were designed to encompass a wide range of sources, including those that are commonly used

as well as some that are legally inaccessible (e.g., medical records). This section also included three items that measured respondents' perceptions regarding the accuracy of information contained in government computer files, business or private company computers files, and credit bureau computer files. Consumers were also asked if they were aware of the Direct Marketing Association's mail and telephone preference services, which provide a way to "opt off" mail and telephone lists. The DMA then makes these lists of consumers who don't want to receive direct mail or telemarketing calls available to direct marketers.

The third part of the survey examined consumers' reactions regarding the availability of specific types of personal information as well as their sentiments toward specific information practices. In the case of the former, respondents were read a list of 15 specific types (see Table 2) of personal information and asked whether they would be "extremely up-

TABLE 1

Data Source Knowledge

	"True"*	"False"***	Don't Know	Actual Data
	(%)	(%)	(%)	Availability
Marketing/Promotional Offers				
Magazine subscription forms	86	7	7	Yes ¹
Contest/sweepstakes entries	84	9	7	Yes ¹
Club/membership applications	71	17	12	Yes ¹
Calls to toll-free numbers	61	21	18	Yes ¹
Public Records				
Auto/vehicle registrations	72	15	13	Depends on state law ²
Birth certificates	52	35	13	Depends on state law ³
Credit and Financial				
Credit card applications	85	4	11	Yes ⁴
Credit reports or histories	78	14	8	Yes ⁴
Credit card purchases	68	21	11	Yes ⁴
Bank/financial transactions	43	49	8	Yes ⁴
Federal income tax forms	38	50	12	No
State income tax forms	38	54	8	No
Other Data Sources				
U.S. census questionnaire	64	27	9	Yes ¹
Insurance applications	54	25	21	Yes ⁴
Medical records	34	56	10	No

* Combined "definitely true" and "probably true" responses

** Combined "definitely false" and "probably false" responses

¹ Information is generally available at an aggregate level from list brokers or rental services

² Availability varies by individual state and was not available in the state in which survey was conducted

³ Availability varies by individual state and was available in the state in which survey was conducted

⁴ Often available at an aggregate level, although names and addresses are usually the only information available to direct marketers

Source for availability information: Direct Marketing Association

TABLE 2

Specific Information Concerns

	Not Upset (%)	Slightly Upset (%)	"Upset"* (%)	Actual Data Availability
Purchase Behavior				
Names of food brands purchased	67	18	14	Yes ¹
Department store purchases	53	27	20	Yes ¹
Catalog purchases	52	26	18	Yes ¹
Personal Information				
Your age	75	15	10	Yes ²
Your religion	56	15	28	Yes ²
Charities you support	53	17	30	Yes ²
Your telephone number	21	29	50	Yes if Caller ID Used
Your credit record	25	15	58	Yes ²
Your social security number	20	14	66	Yes ²
Your annual income	15	17	68	Yes ² (range data)
Your medical records	16	11	73	No
Your bank balance	9	11	80	Only for credit checks
Media Habits				
TV programs watched	73	15	11	Yes ¹
Magazines subscribed to or read	69	19	12	Yes ²
Videotapes rented	54	17	26	Limited to subject matter of tapes rented

* Combined "Upset" and "Extremely Upset" responses

¹ Information is generally available concerning those people who participate in shopper, buyer, or viewer programs

² Information is generally available at an aggregate level from list broker or rental services

Source for availability information: Direct Marketing Association

set," "upset," "slightly upset," or "not at all upset" if that information were made available to marketers and advertisers without their permission (again with the order rotated). For the latter, seven different scenarios (see Table 3), each concerning an actual information gathering or use practice, were read. For each, respondents were asked to indicate if they, personally, would consider the practice an "extremely serious," "somewhat serious," "minor invasion," or "not an invasion" of their personal privacy. They were also asked for each scenario to indicate whether they would consider the practice "very unethical," "somewhat ethical," "somewhat unethical," or "completely ethical," irrespective of whether they perceived the practice as privacy-invasive. This followup was designed to assess an important, but as yet unaddressed, issue with respect to information gathering and use practices: mainly, is "privacy" consumers' primary concern? Given that much of the privacy debate centers around information control (27,28), consumer disdain for many

information gathering or use practices may be related more to ethical than privacy considerations. If so, that would suggest an ethics perspective should not only frame discussions concerning consumer information practices, but also guide policy and regulatory decisions.

The fourth section of the survey measured consumers' beliefs regarding alternative courses of action that could be taken regarding marketers and advertisers' gathering and use of personal information. Participants were asked to respond to a series of statements using four-point scales, anchored by "strongly agree" and "strongly disagree." The six statements concerning regulation offered alternatives that ranged from maintaining the status quo to establishing a federal commission to protect the privacy rights of consumers. The section included three "agree-disagree" items from the Equifax survey that further assessed consumers' personal privacy concerns as well as provided a frame of reference.

TABLE 3
Privacy and Ethical Perceptions

	Privacy Perception		Ethical Perception	
	Not or Minor Invasion (%)	"Serious" Invasion ¹ (%)	"Ethical" ² (%)	"Unethical" ³ (%)
A magazine publisher sells its list of subscribers so other companies can sell you goods or services.	60	38	43	55*
A business calls you at home and tries to sell you something	45	55	48	52
Merchants writing a code on the back of a check to record your race or ethnic group	39	61	25	75*
Credit/charge card companies monitoring the balance in your bank account.	36	63	35	63
The U.S. Postal Service rents or sells your address to direct mail companies and other businesses	29	68	16	80
A company uses an automatic telephone number identification system (without your knowledge) to identify your phone number and address when you call them	27	69	17	79
Companies collecting personal information about you for one purpose and then renting that information to other companies to use for different purposes.	20	80	16	84

* $p \leq .05$

¹ Combined "Somewhat Serious" and "Extremely Serious" responses

² Combined "Completely Ethical" and "Somewhat Ethical" responses

³ Combined "Somewhat Unethical" and "Very Unethical" responses

Finally, the last section of the questionnaire consisted of a series of demographic items, including questions regarding respondents' catalog and television home shopping purchase behavior.

Sampling and Data Collection

The 15-to-20 minute-long telephone survey was conducted among adult consumers living in a medium-sized Southeastern United States metropolitan area (i.e., approximately 150,000 people lived in the survey region). The data collection took place between April 22 and May 10, 1991, using student interviewers trained and supervised by the authors. A total of 26 students enrolled in a research methods class took part in the interviewing. Phone calling took place between 4 p.m. and 10 p.m. on weekdays, and between 10 a.m. and 4 p.m. on weekends.

The randomly selected phone numbers for the survey were generated using Plus-One sampling (5,12). This method, which is designed to capture, in proper population proportions, both listed and unlisted residential phone numbers, involved

drawing a random probability sample from the area telephone directory and then adding a single, randomly generated digit (i.e., "9") to each of the selected numbers. In total, 700 telephone numbers were generated. Of these, there were 266 completed interviews, 142 refusals, 137 disconnected numbers, 123 "no answers" (including answering machine and line-busy responses), 27 ineligible business or government numbers, and 5 terminated interviews. Excluding the disconnected and ineligible numbers, the response rate for the survey was 49.6%. Based on the number of contacts, the cooperation rate was 64.4%. The sample size of 266 resulted in a sampling error that ranged from 5 percent to 8 percent at a 95 percent confidence level.

RESULTS

Respondents

The results indicated respondents were representative of the survey area with respect to gender (54

TABLE 4
Beliefs Regarding Privacy Protection

	"Agree" ¹ (%)	"Disagree" ² (%)	Unsure (%)
It's acceptable for direct marketers to buy or sell the names and addresses of consumers without their knowledge.	19	78**	3
Consumer privacy rights are adequately protected today by law and business practices.	21	68	11
Government should limit amount and type of consumer information that can be collected.	87*	10	3
There should be a federal commission or system to protect consumers' privacy.	87*	11	2
Companies should have to get written permission from consumers before they sell or rent personal information.	91*	7	2
The federal government should do more to protect the privacy rights of consumers.	91*	6	3

¹ Combined "Strongly Agree" and "Somewhat Agree" responses.

² Combined "Strongly Disagree" and "Somewhat Disagree" responses

* Over half of all respondents "Strongly Agreed "

** Over half of all respondents "Strongly Disagreed "

percent female and 46 percent male), but skewed with respect to age. Since about 60 percent of the respondents fell between 18 and 34 years old, the data was weighted so that it more accurately reflected the age distribution typical of the region. The weighted data, in which 22 percent of the sample was 18 to 24 years old; 21 percent was 25 to 34; 18 percent was 35 to 44; 13 percent was 45 to 54; 12 percent was 55 to 64; and 13 percent was 65 years old or older, served as the basis for the statistical analyses. In terms of education, 25 percent of the sample attended graduate school; 20 percent had a college degree; 29 percent attended some college or technical school; and 22 percent graduated from or attended high school. A total of 26 percent of the respondents indicated their annual

household income exceeded \$49,000 a year; 18 percent fell between \$25,000 and \$49,000, 22 percent between \$10,000 and \$24,999, and 15 percent under \$10,000.

Although the demographic composition of the sample reflected the unique characteristics of the survey region, this did not present major problems given the study's objectives. First, by definition, the regional focus of this survey makes this exploratory research. At this stage, the results are meant to be suggestive, not representative, with respect to all U.S. consumers. Second, the age, education, and income composition of this sample is a relatively accurate depiction with respect to direct marketing shoppers. McCorkle, Planchon, and James' (1987) comprehensive review of the direct marketing shopping literature, for example, found higher education and income were consistently positively correlated with in-home shopping behavior. Here, the results showed 64 percent of the respondents had purchased a product or service from a catalog in the past year. About half (49 percent) said they made one to three catalog purchases a year, while 31 percent made four or more purchases a year. Further, 47 percent said they typically called a toll-free 800 number one to three times a month; with another 27 percent making at least four calls a month. This group thus provided an appropriate sample in the sense that consumers such as these typically are assumed to be the most knowledgeable about direct marketing practices.

General Level of Privacy Concern

Overall, the results showed the level of concern was comparable to that found in the 1990 Equifax study, only the degree of concern was somewhat less. Thus, of the 82 percent who indicated concern about threats to personal privacy, 31 percent were "very concerned" and 51 percent were "somewhat concerned" (vs. 46 percent and 33 percent in the Equifax survey (7)). Also similar to the Equifax survey, 51 percent of the respondents said they had refused to give information to a company because they thought it was unnecessary or too personal, and 39 percent said they had asked a company to remove their name and address from a mailing list.

About 75 percent of the respondents agreed that "consumers have lost all control over how personal information about them is used and circulated by

companies," and 64 percent agreed that "consumers are being asked to provide excessive amounts of personal information." Not only did half the respondents "strongly agree" with the statements, but the percentages again corresponded to those found in the 1990 Equifax survey (i.e., 71 percent and 57 percent). Most respondents (71 percent) also indicated Americans had less personal privacy today than ten years ago, with 21 percent saying it was "much less." Despite the generally high levels of concern regarding personal privacy, only 37 percent said they had heard or read a lot about the potential use or misuse of computerized information about consumers, with 60 percent indicating they had heard or read very little. In terms of social issues, "protecting personal privacy rights," along with four other issues, had an average score of nine on a scale where zero was "not important at all" and ten was "very important." "Defending freedom of the press" with an average score of 7.8 was ranked the lowest.

A series of subgroup analyses also showed there were important differences with respect to respondent characteristics. First, 35-to-64 year-old respondents had the greatest concern; with 45 percent "very concerned" about threats to personal privacy. Second, while concern about threats to personal privacy did not vary across gender, education, or income, the degree of concern was: a) less among people who read or subscribed to a daily newspaper; and b) positively correlated with having read or heard about the use or misuse of personal information. According to the results, 75 percent of the respondents who regularly read the major daily newspaper indicated concern about personal privacy versus 88 percent among those who did not (Chi Square 8.4; $p = .015$). Although these respondents were more likely to have heard or read about the use of personal information (42 percent vs. 32 percent, Chi Square 7.1; $p = .03$), such knowledge appeared to negatively affect concern levels. In this case, 39 percent of those who heard about the use of personal information were concerned about threats to personal privacy, compared to 29 percent for those who had not heard about the use of such information (Chi Square 30.5; $p = .001$). Finally, requests for removal from a mailing list did not correlate with gender or income, but did correlate with age, education, and privacy concern. A total of 48 percent of those under 35 years old said they had

requested removal from a mailing list versus 36 percent for those 35 and older (Chi Square 7.5; $p = .02$). In terms of education, 51 percent of those who had four or more years of college had requested removal from a mailing list, compared to 34 percent of those with some college/technical school, and 29 percent for those with a high school education (Chi Square 10.5; $p = .015$). About 46 percent of the respondents concerned about threats to personal privacy had requested removal from a mailing list versus 31 percent among unconcerned (Chi Square 11.7; $p = .01$).

Information Gathering and Use Knowledge

In general, the results suggested the public has widely varying perceptions regarding the types of information accessible to direct marketers, as well as the accuracy of the information contained in databases. About one third (36 percent) believed that most information gathered by federal and state governments is not legally available to marketers, with another 16 percent unsure. Further, as Table 1 shows, a considerable number of respondents were uncertain, or wrong, about the sources of personal information available for marketing purposes, particularly with respect to public databases. Most consumers, for instance, were aware that personal information gathered under marketing pretexts, such as subscription forms and calls to toll-free numbers, was accessible. However, only 61 percent knew that direct marketers could access information collected via toll-free telephone lines (e.g., such as telephone numbers obtained through the use of automatic phone number identification systems [ANI]), and only 52 percent believed marketers and advertisers could obtain birth certificate information. Conversely, most respondents believed auto/vehicle registration and state income tax form information was available, even though those records are not legally accessible to marketers in the state where the survey was conducted. Overall, the results also showed a large percentage of people believed marketers and advertisers could rent the personal information collected in bank/financial transactions, federal income tax forms, and medical records.

There was little difference in respondents' perceptions regarding the accuracy of the personal information contained in those databases accessible to marketers. Overall, the results indicated about

40 percent of the respondents believed that one-quarter or more of the personal information contained in government, business, and credit bureau computer files was inaccurate or incorrect. About 25 percent said there was very little inaccurate or incorrect personal information in those files (e.g., 10 percent or less were inaccurate), while the remaining 25 percent said 11 percent to 25 percent of the information was inaccurate.

The results also indicated over half the respondents (59 percent) had heard of the Direct Marketing Association's mail preference service, but only 35 percent had heard of the telephone preference service. Awareness of the mail preference service was higher among females than males (60 percent versus 48 percent, Chi Square 8.2; $p = .04$); among those 35 years old and older (63 percent versus 47 percent, Chi Square 15.4; $p = .004$); and among those with four or more years of college (68 percent versus 45 percent for some college/tech school and 43 percent for high school or less, Chi Square 20.4; $p = .002$). There were no statistically significant demographic differences with respect to knowledge of the telephone preference service, but 42 percent of the daily newspaper readers were aware of the service compared to 25 percent of nonreaders (Chi Square 11.6; $p = .003$).

Assessments of Specific Information Practices

As Table 2 illustrates, consumers have clear sentiments regarding the types of personal information that are made available to marketers and advertisers. The grouped data shows concern levels vary both in and across information categories. First, respondents expressed the least amount of concern over purchase behavior and media-habit information. In both cases, the vast majority said they would be slightly or not at all upset if those types of information were made available to marketers or advertisers without their permission. Not surprisingly, the item that drew the most concern was videotape rentals. Second, there were distinct differences with respect to the category that drew the most concern—personal information. The results indicated consumer concern was related to two factors: 1) specificity of the information (i.e., the degree to which it was directly traceable to the individual); and 2) financial data. Over half the respondents, for

example, said they would be upset if their telephone number, social security number, or medical records were made available without their permission. Similarly, most people said they would be upset if financial information, such as annual income or bank balances, was made available to marketers. In both cases, the demographic analyses showed concern increased with age, with those 35-to-64 years old disproportionately represented in the "Upset" column.

As Table 3 illustrates, there was also considerable concern over secondary uses of personal information as well as surreptitious data collection methods. In the case of the latter, 80 percent said collecting information for one purpose and then renting that information to other companies to use for different purposes was an invasion of personal privacy. That perception, however, appeared to be related to consumer expectations, with privacy concerns less for organizations associated with information. Thus, the percentage of people perceiving information rental to be an invasion of privacy was 68 percent when the practice involved the U.S. Postal Service, but decreased to 38 percent when magazine publishers were involved. In the cases of information collection practices, about two-thirds categorized automatic number identification systems and bank account monitoring as invasions of personal privacy. Further, as Table 3 also illustrates, the results suggested respondents were indeed more likely to construe information gathering and use practices as "unethical" than as privacy invading. First, over half considered all the practices described to be either "somewhat" or "completely" unethical. Second, the percentage of people classifying a practice as "unethical" generally exceeded the number who considered it a privacy invasion. This difference was statistically significant for both the rental of names by magazine publishers and the coding of checks by merchants. Combined with the directional results for the Postal Service and automatic telephone number identification systems, the results suggest ethics is a perspective in need of further research.

Privacy Protection

Only a fifth of the respondents believed consumer privacy rights were adequately protected by existing laws and business practices (see Table 4). Rather, the results reaffirmed the Equifax finding that "consumers want to be informed and empowered" when

it comes to the gathering and use of personal data (7, p. XXVI). Only 19 percent said it was acceptable for direct marketers to buy or sell the names and addresses of consumers without their knowledge, with 91 percent stating that companies should be required to obtain written permission. Similarly, 87 percent indicated support for government limits on the amount and type of consumer information that can be collected. In both cases, over half of all respondents "strongly agreed." Further, about twice as many people in this survey as in the 1990 Equifax survey supported the creation of a federal commission or system to protect consumers' privacy (i.e., 87 percent versus 41 percent). Similarly, 91 percent either "strongly" (68 percent) or "somewhat" (23 percent) agreed that the federal government should do more to protect the privacy rights of consumers.

CONCLUSIONS AND IMPLICATIONS

The findings, although limited by the regional nature of the survey, provided considerable direction with respect to answering the four sets of questions posed at the outset. First, the results of this study lent further support to the conclusion of other recent studies (e.g., 7, 9) that many consumers are concerned about threats to personal privacy. Respondents' general pattern of responses as well as the percentages of people taking action (e.g., requesting removal from mailing lists) indicate that marketers, including direct marketers, are a source of these privacy concerns. More importantly, the results suggest direct marketers have made little headway in alleviating consumer concerns. One year after the 1990 Equifax study was conducted, this survey found similar percentages of respondents believed consumers were asked to provide excessive amounts of personal information and that they had little control over the subsequent use of such information. Given that 60 percent of the survey respondents were 18–34 years, the results obtained here likely understate, rather than overstate, consumers' privacy concerns. Older respondents, for instance, not only have more concern, but a wider, and more appropriate, perspective from which to judge information gathering and use practices (e.g., much of the technology that makes many practices possible was developed in the past decade, when 18–34 year olds were 8–24 years old).

Overall, the results also indicate a great need for consumer education. Only half the respondents had heard of the DMA's mail preference service, less than half had read or heard about the use or potential misuse of consumer, and only a third had heard of the DMA's telephone preference service. Although publicizing questionable information practices is understandably not a goal of direct marketing practitioners, respondents' answers regarding information practices suggest both ignorance and negative stories or publicity are significant contributors to privacy concerns and the resultant desires for regulation. Assuming that knowing how to control or limit access to information is a necessary condition for taking action, the evidence suggests promoting methods that allow consumers to "opt off" lists, such as the DMA's preference services, will likely have a positive impact. The finding that those under 35 years old had lower concern levels but were more likely to have requested removal from a mailing list than older respondents, for instance, implies concern is reduced by the ability to take action. Younger respondents, therefore, may have been less concerned about privacy than 35–64 year olds either because they had taken action (i.e., removed their name from a mailing list) or because the concern levels of older respondents were heightened by the belief that little could be done to limit access to personal information.

The value of education is also supported by the seemingly contradictory results involving privacy concerns, newspaper readership, and having heard about the use or misuse of personal information. Thus, newspaper readership is associated with lower levels of concern, while having heard or read about information gathering and use practices is associated with greater concern. It would therefore appear that people have been exposed to more negative than positive articles or stories, and/or that negative publicity has had a more significant impact on perceptions. In either case, educating consumers about how information is gathered, used, stored, or shared would likely reduce misunderstanding and concern. The pattern of results also suggests many concerned respondents became aware of the use or misuse of personal information from sources other than newspapers, such as television, radio, and word-of-mouth.

The above findings, however, are not the only evidence that knowledge, or lack thereof, is a major

determinant of privacy concerns. Many of the subgroup analyses also support the notion. For example, those most concerned about threats to personal privacy appear to believe direct marketers have access to any and all sources of personal information. Further, those respondents were more likely to characterize commonly employed information gathering and use practices such as list rentals as "invasive," and to favor limits on information collection and dissemination. Fortunately, the finding that regular newspaper reading was associated with decreased concerns and increased awareness of solutions (e.g., the telephone preference service) attests to the power of information. Although, as noted, consumers likely obtain information from a variety of sources.

Somewhat alarmingly, many respondents were unaware that much of the personal information gathered by government entities is accessible to marketers. One third believed birth certificate information was inaccessible, with a similar percentage confused or uncertain about vehicle registration information. The relative lack of consumer knowledge is further reflected, as Table 2 shows, by the large percentages of respondents who were confused or uncertain about other potential information sources. Close to half believed that direct marketers had, or may have, access to the personal information found in bank/financial transaction reports and income tax forms. A slightly lower percentage believed medical records were accessible. Taken as whole, these results indicate most consumers have a limited understanding of the "public" (i.e., open) records concept as well as where to direct their concern. Since much of the personal information used by direct marketers comes from public records, the information gathering and use practices of government entities should receive a greater amount of public attention. This attention should focus less on whether direct marketers (or other people) should have access to public records (i.e., they should), but rather on the purpose of open records and on the information that should be contained in such records.

Finally, the results regarding consumers' beliefs about specific types of information, and their strong sentiments regarding privacy protection, lead to two important conclusions. First, there is a dire need for future consumer research. Not only does the exploratory nature of this study require a replication

involving a national sample, but the results involving ethical perceptions demand further examination. The finding that over half the respondents perceive direct marketing practices to be unethical implies "privacy" is either a poorly defined construct or is masking consumers' true concerns. Second, it is relatively clear that marketers and advertisers who rely on personal information need to take proactive steps to alleviate consumer privacy concerns and to reduce the desire for legislative action. Based on this study's findings, effective self-regulation will require establishing guidelines which clearly delineate what kinds of personal information legitimately can be collected, how often information should be updated, and who can have access. Visible steps, such as implementing periodic consumer reviews to ensure the accuracy and currency of database information, also have much merit. As these results show, consumer education must be a priority. Many people, including those who are relatively frequent in-home shoppers, are unaware of, or don't understand, direct marketing practices. Consumers' perceptions regarding the accuracy of databases also imply that direct marketers need to overcome a considerable amount of skepticism and cynicism. It is therefore essential that consumers be made aware of self-regulatory actions as well as be educated about information practices in general. Without such a commitment, it is likely consumers will continue to voice disdain with legitimate direct marketing information practices and look, instead, for governmental protection and legislative action. ■

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