# **Predictors of Public Perceptions of the Internet**

by

Paul D. Skalski, M.A.

(p.skalski@csuohio.edu)

Department of Communication Cleveland State University Cleveland, OH 44115

> 216.687.5101 fax 216.687.5435

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## **Predictors of Public Perceptions of the Internet**

#### **Abstract**

The Internet has been a high profile communication technology in recent years, leading to perceptions about how the medium may impact the world and provide information to people who use it. What factors contribute to public perceptions of the Internet? Past research and diffusion of innovations theory suggest that individuals with higher socioeconomic status and media use will have more favorable attitudes and opinions about new technologies such as the Internet. This study explores how traditional diffusion adopter characteristics, along with some novel predictors, relate to public opinion about the Internet. Results indicate that social locators, as expected, are the primary predictors of public perceptions of the Internet, with higher income in particular leading to more favorable attitudes toward the technology.

### **Predictors of Public Perceptions of the Internet**

#### Introduction

The Internet has been an inescapable part of American life in recent years. The medium has garnered a swarm of media coverage in the past decade, ranging from Al Gore's christening of the "information superhighway" to controversies over cyberporn to, recently, the Microsoft anti-trust ruling. Though the media has been a key contributor to the high profile of the Internet, it has certainly not been the only one. The phenomenal growth rate of the technology also has to be considered a factor. A September 1999 survey by Nielsen/NetRatings indicates that there are now approximately 110 million users online, with a increase rate of 2 to 4% per month. Given the high-profile media presence of the Internet, along with its millions of users (and potential interpersonal information diffusers), just about everyone must have an awareness of the Internet and, thus, opinions and attitudes about it.

To date, a large proportion of Internet research in the field of communication has tried to profile users and non-users of the medium in terms of social categories, media use and the like. Jeffres and Atkin (1996) examined people's likeliness to use new technologies like the Internet. Their findings showed, surprisingly, that income and education were inversely (though slightly) related to a person's likeliness to use new technology. In a study of personal computer adopters, Lin (1998) found higher income and lower age to be significant predictors of PC adoption. In terms of media use, the study found newspaper, magazine and radio consumption to be irrelevant to personal computer adoption, while television viewing was an inverse predictor. The author hypothesizes that this may be due to the fact that TV and computers are both "electronic visual window" technologies that compete for media use.

In a later article directly addressing the Internet, Atkin, Jeffres and Neuendorf (1998) found education and income to be predictive of Internet adoption, while age was an inverse predictor. Individuals with Internet access were also found to be more frequent newspaper readers, though they were less frequent radio listeners and television viewers. These findings are somewhat consistent with past related findings, which suggest that computer technology adopters are younger, more affluent and better educated (e.g. Mitchell, 1994) and consume less television (e.g. Vitalari, Venkatesh and Gronhaug, 1995).

Most of the studies in this line of research employed diffusion of innovations theory (Rogers, 1995). Diffusion is defined as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (p. 10). Innovation refers to an idea, practice or object perceived as new. As these definitions suggest, the diffusion of innovations theory can be applied to a broad spectrum of contexts, ranging from marketing to geography to sociology and, of course, communication. In the most recent edition of his book, Rogers notes that most new ideas regarding the theory relate to technological innovations. He defines technology as "a design for instrumental action that reduces the uncertainty in the causeeffect relationships involved in achieving a desired outcome" (p. 35). The Internet represents a technological innovation with a number of applications, especially for communication. Through the Internet, individuals can communicate through mass (e.g. Web sites) and interpersonal (e.g. e-mail) channels on a global scale. The Internet also serves as the backbone of the "information superhighway" and can open up a world of information to users. As a technological innovation, the Internet offers potential adopters a vast palette of tools for achieving "desired outcomes."

Innovativeness refers to the degree to which an individual is relatively earlier in adopting new ideas (Rogers, 1995). According to the diffusion effect (the increasing degree of influence

on an individual of adopt or reject an innovation), adopter distributions approach normality over time due to peer networks about the innovation. Recent statistics, as mentioned, indicate that the Internet has been adopted by about 110 million people, with new users are cruising onto the "superhighway" every day. These users, according to diffusion theory, fit into a continuum of adopter categories that approximate a normal curve. At the current Internet diffusion stage, its adopters probably encompass innovators early adopters and early majority.

Earlier adopters, according to diffusion theory, have demographic and socioeconomic characteristics that differentiate them from later adopters (Rogers, 1995). Though age does not tend to differ in the case of general innovations, technological innovations such as computers tend to be adopted by younger individuals first. Earlier adopters also tend to be more educated, more literate and have a higher social status. They tend to have a greater degree of upward social mobility as well. In general, then, early adopters have a higher socioeconomic status than later adopters.

Earlier adopters also differ from later adopters in terms of personality and communication behavior, according to diffusion theory. Earlier adopters, among other things, tend to have a more favorable attitude toward education and science. In regards to communication behavior, earlier adopters tend to have a greater exposure to mass media and interpersonal communication. They also engage in more information seeking and have greater knowledge and ownership of other innovations.

As the stream of research cited above shows, diffusion theory has been used primarily to explain behavioral effects of new innovations like the Internet--i.e., adoption. These behavioral studies look at adopters after they have adopted. But, as Rogers himself notes, crucial precursors to behavior are knowledge (cognition) and attitudes (affect), since they affect perceived newness and other preliminary aspects of the diffusion process (Rogers, 1995).

Cognition and affect also precede behavior in communication/persuasion models such as McGuire's (1989) hierarchy-of-effects theory. In the "high-involvement" sequence of hierarchy of effects, cognitions develop first, followed by attitude formation and finally behavior. Since computer and Internet adoption are high-involvement decisions (as opposed to low involvement), opinions and attitudes about the Internet are important precursors to decisions to adopt and thus become a user. Of course, cognitive and affective perceptions of technology are also valuable by themselves, since they tap into the public consciousness concerning the innovation both among users and non-users.

Past research on public views of new media technologies such as the Internet have generated findings in line with diffusion principles. Reese et al. (1984) found that more well off, younger individuals had more positive perceptions of new technologies. Older people were more apprehensive about technologies such as computers. A public opinion poll specifically about the Internet backs up and augments these findings—the study showed that non-users are older, less educated and well off, and more likely to be female and non-white. In addition, the number one perceived barrier to Internet access among all respondents (both users and non-users) was that it "costs too much," followed by several education-related reasons such as "no idea of how to do it" (Katz & Aspden, 1997). These studies highlight the relationship between socioeconomic factors such as education and income and perceptions about technologies such as the Internet.

In light of past research on audience perceptions of technology, and diffusion theory, the following hypotheses are advanced:

H1: Social locators will explain a significant portion of the variance in public opinions about the Internet.

H2: Traditional media use will explain a significant portion of the variance in public opinion about the Internet.

H3: Internet and e-mail use will explain a significant portion of the variance in public opinion about the Internet.

**H4**: Technology adoption will explain a significant portion of the variance in public opinion about the Internet.

In addition to these four sets of variables, other possible predictors will also be explored, including quality of life assessments, public opinion on a variety national, local and social items, and affective filters. Several recent studies have shown how novel constructs, such as affective filters, are significantly related to "traditional" measures such as social categories and media use (e.g., Neuendorf, 1998; Neuendorf & Skalski, 1999; Atkin et al., 1999). In an attempt to extend this line of research and more fully understand the forces that shape perceptions of the Internet, the following research question is advanced:

**RO**: What is the relative influence of social locators, media use, email & Internet use, technology adoption, quality of life assessments, public opinion, and affective filters on perceptions that the Internet will a) change the world for the better, b) violate people's right to privacy, and c) provide lots of needed information.

#### Methods

In the spring of 1999, a probability sample of residents of a major metropolitan area in the U.S. Midwest responded to a survey collected using a Computer Assisted Telephone Interviewing (CATI) system. The sample of 321 adults was 60% female, with a median household income of \$20,000 to \$30,000 and a mean age of 41.6 years, and was composed of 32.3% college graduates, 45% democrats (or "leaning" toward Democrat), 24% Republicans (or "leaning" toward Republican), 30% self-designated "liberals," and 32% self-designated "conservatives."

Included in the instrument were measures for a wide variety of social categories: Age (in years), marital status, level of education achieved, racial/ethnic background (dummy coded for non-white status), political party affiliation (a 5-point scale ranging from "strong democrat" to "strong republican"), liberalism/conservatism (a 5-point scale ranging from "strongly conservative" to "strongly liberal"), household income, and gender (dummy coded for femaleness).

Using an 11-point Likert-type response scale (0=strongly disagree; 10=strongly agree), three Internet public opinion items were included in the questionnaire: (1) "The Internet will change the world for the better," (2) "The Internet violates people's right to privacy," and, (3) "The Internet will provide me with lots of information I need." The following public opinion items, using the 11-point scale again, were also included:

Bill Clinton is doing a good job as president.

Michael White is doing a good job as mayor of Cleveland.

Bill Clinton should have been removed from office.

There has been too much media coverage of the Clinton impeachment process.

There has been too much media coverage of Monica Lewinsky.

I believe that O.J. Simpson is innocent of murder.

Abortion should remain legal.

I am concerned I will get AIDS.

The government should guarantee health care to all Americans.

We need more government controls over who can purchase guns.

Affirmative Action is still necessary to help minorities and other groups.

I have been discriminated against because of my race.

I think African Americans are discriminated against in the workplace.

I think African Americans have less opportunity for education than do other Americans.

I suffer from information overload much of the time.

The Rock & Roll Hall of Fame has had a major impact on improving Cleveland's image.

The Drew Carey Show has had a major impact on improving Cleveland's image.

Standard measure of media exposure were included in the survey--hours of television watched yesterday, hours of radio listening yesterday, newspaper readership during the past week (in days), number of magazines read regularly, number of books read in the past six

months, number of videos viewed in the past month, and number of movies watched in a theater in the past month. Internet exposure was measured with items asking respondents to indicate frequency of email usage in the last week and hours of Internet use in the last week. Measures of adoption of a number of other newer media technologies were also included by asking about home access to each of the following: a VCR, a CD player, a DVD player, a laserdisc player, a camcorder, cable TV, a satellite dish, a cell phone, and a computer. A final technology item asked respondents about DTV: "On a scale of 0 to 10, where 0 means not at all and 10 means a great deal, how eager are you to get DTV?"

The survey instrument also included six quality of life indicators based on past research in that area (Atkinson, 1982; Campbell, 1981; Diener & Suh, 1997), with each item measured on an 11-point scale: (1) Assessment of the [metropolitan] area and (2) "the neighborhood you live in" ("with 0 being the worst place to live and 10 being the best place to live"); and using a scale in which "0 means you are completely dissatisfied and 10 means you are completely satisfied--(3) "how things are going in your job," (4) "how things are going in your family," (5) "how things are going in your personal life," and (6) "how things are going in the nation today."

A set of 11-point Likert-type items tapped the respondents' multifaceted senses of humor. These items were assembled from earlier work (McGoun & Neuendorf, 1995; Neuendorf & Skalski, 1999), with several items added specifically to tap social humor functions not well measured in previous attempts. In the process of factor-analytic index construction, one item--"Something is funny to me only if I find the situation realistic"—was removed due to its failure to load with other items in the analysis, a statistical performance identical to that discovered in an earlier data collection (Neuendorf & Skalski, 1999). The final 16 sense of humor items were submitted to a principal components factor analysis with orthogonal rotation

(oblique rotation resulted in very similar findings, and so a judgment was made to retain the orthogonal solution for the sake of parsimony). Five factors resulted, capturing 63% of the total variance of the pooled items. Indexes of relatively independent dimensions, or "senses of humor," were constructed via factor scores. The five resultant indexes were: (1) Mean-spirited humor, with primary loadings for measures of appreciation for sexist, racist, sexual, and sick humor; (2) Visual/verbal humor, an index tapping appreciation for humor in symbolic (nonverbal and verbal) stimuli, with primary loadings for measures of affinity for sight gags, slapstick, bloopers, and jokes that involve wordplay; (3) Stupid/absurd humor, with primary loadings for measures of appreciation for the humor in absurdity, stupidity and accidental events; (4) Social humor, with primary loadings for the items "I use humor to lighten things up" and "I use humor to get to know people better;" and (5) Satire/death humor, with primary loadings for items measuring liking of satire and humor about death.

To measure the respondents' levels of state **depression**, the 20-item CESD Scale (Center for Epidemiological Studies Depression Scale; Robinson, Shaver, & Wrightsman, 1991) was utilized. The standard technique of straight additive index construction was employed, with a resultant Cronbach's alpha of .85.

Based on previous research (Neuendorf, 1998), ten items were included that measure the construct of wallowing, the tendency to seek mood-congruent, sad media content (e.g. weepies or melodramas) under conditions of state depression. A summative index of the ten items was constructed.

Variables were grouped into seven predictor blocks (listed in order of entry)--social categories, traditional media use, new media use (i.e., email and the Internet), new technology adoption, quality of life, public opinion, and affective filters. Forced-entry hierarchical multiple

regression was used to predict each of the three Internet public opinion measures and a scale of "overall" Internet public opinion representing the three individual Internet items (the standard technique of additive index construction, with the privacy invasion item reverse coded, was employed, with a resultant Cronbach's alpha of .56). Scores on this summative variable should give some sense of "overall" perceptions of the Internet, with higher scores representing more favorable opinions overall and lower sores representing less favorable opinions.

#### Results

The results of the hierarchical multiple regression analysis predicting how respondents view the future impact of the Internet ("The Internet will change the world for the better") are shown in Table 1. The equation is not significant, with only 44% of the variance accounted for by the seven blocks (Adjusted  $R^2$ =.047,  $F_{(57,140)}$ =1.122, p=.313). However, the social locators block approaches significance (p=.052) and contains two unique, significant individual contributors (i.e., variables with significant beta coefficients)--having a higher income and being white (vs. non-white).

The regression equation predicting assessments of whether the Internet violates privacy rights, shown in Table 2, is highly significant overall, explaining 60% of the variance in the dependent variable (Adjusted R<sup>2</sup>=.314, F<sub>(57,139)</sub>=2.117, p=.001). Three of the blocks contribute a significant amount of variance to the overall equation: social locators (explaining 15% of the variance), media use (explaining 11%), and affective filters (13%). Looking at the significant individual contributors (i.e., significant betas), we can say that those who believe the Internet violates privacy rights are more likely to have a lower income, be female, and be non-white. They are also likely to watch more television and listen to less radio. Finally, this group is less

likely to appreciate absurd/stupid humor, more likely to appreciate social humor, and is more likely to be depressed and wallowers.

The results of the regression predicting the perceived usefulness of the Internet as an information provider ("The Internet will provide me with lots of information I need") are shown in Table 3. This equation has the *highest* significance of all the regressions, explaining a full 62% of the variance in the dependent variable (Adjusted  $R^2$ =.361,  $F_{(57.141)}$ =2.397, p<.001). Only two blocks, however, are significant: social categories (explaining 20% of the variance) and public opinion (explaining 15%). The unique, significant contributors from the three blocks are: being younger, having a higher income, being liberal in ideology, and believing that the Rock and Roll Hall of Fame has improved Cleveland's image..

A final equation, predicting a composite measure of Internet public opinion (i.e., an index of the three individual dependent variables), is shown in Table 4. The total equation is once again significant, with 57% of the variance of the dependent variable accounted for (Adjusted  $R^2$ =.263,  $F_{(57,138)}$ =1.863, p=.005). The only significant block, however, is that of social locators, contributing 19% to the variance explained. Significant individual positive contributors (i.e., significant betas) are: having a high income, being male (vs. female), and being white (vs. nonwhite).

#### **Discussion**

The results of these four regressions strongly support the first hypothesis—social locators emerges as a significant predictor of Internet public opinion on three variables and approaches significance on the fourth (p = .052). The other three hypotheses, however, are generally not supported, though media use is significant in one of the regressions. Bivariate relationships,

however, show some support for the idea that individuals with more positive perceptions of the Internet use the Internet more and own more types of technology, especially computers.

Overall, social categories are clearly the primary predictor of public opinion about the Internet, at least in the case of these four variables. Of particular note: when individual variables are examined in each block, income turns out a significant positive predictor all four times. The blocks also show that positive perceptions of the Internet are more likely to come from younger individuals who are more likely to be male and white. Interestingly, education does not emerge as significant in betas or bivariate correlations, which is counter to diffusion theory. Other studies have also found no relationship between computer technology and education (e.g., Lin, 1998; Jeffres & Atkin, 1996). This finding bears further exploration in future studies.

As for the research question, no novel predictors show a pattern of significance across the four variables, though public opinion and affective filters do predict the perceptions that the Internet invades privacy and provides lots of useful information, respectively. Of the affective filters block, depression and wallowing are strong individual variables, suggesting that more "down" people are more likely to perceive the Internet as invading their privacy; perhaps the Internet is even a contributor to feeling depressed. The other finding, that of public opinion being a predictor of the Internet providing lots of information, makes intuitive sense. The Internet contains a world of information about matters of public opinion; thus, individuals who have stronger opinions seem to think that the Internet will provide them the tools to shape and hone those opinions in the future.

### Conclusion

This results of this study seem to indicate that the Internet is still a technology for "haves" and not the "have nots." Though Internet optimists contend that the medium can break down social barriers and provide a world of information to all, the findings of this study suggest otherwise. Among the less well-off and historically downtrodden, there seems to be a perception that the Internet is not a great equalizer, and that it won't affect lives in a positive way. Future studies should attempt to duplicate these findings with more measures of Internet public opinion, to see whether the social barriers break down over time or remain.

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Table 1: Hierarchical Multiple Regression Predicting a Positive Future Role of the Internet

Block					
Independent Variable	r	Final β	Inc. R <sup>2</sup>	F	<u>p</u>
1. Social Categories			.108	1.996	.052
Age	174**	.007			
Education	.046	055			
Gender (female)	196**	144			
Income	.193**	.216*			
Marital Status (married)	054	149			
Political Ideology (liberal)	.103	.011			
Political Party Affiliation (republican)	.053	094			
Race/Ethnicity (non-white)	114*	191*			
2. Media Use			.046	.964	.461
Television	019	037			
Radio	018	.060			
Newspaper	.011	.128			
Magazines	.042	.096			
Books	047	125			
Videos	.110	.175			
Movies	.124*	007			
3. New Technology Use			.015	1.139	.323
E-Mail	.132*	.080			
Internet	.199**	.105			
4. Technology Adoption			.083	1.250	.268
VCR	.132*	.011			
CD Player	.228**	.135	A)		
DVD Player	012	101			
Laserdisc Player	.094	008			
Camcorder	.112	.061			
Cable TV	028	242*			
Satellite Dish	.142*	.062			
Cellular Phone	.130*	.113			
Computer	.179**	.073			
Eagerness to get DTV	.140*	.087			
5. QOL Assessments			.051	1.314	.257
Rating of [metropolitan] area	.128*	100			
Rating of neighborhood lived in	.056	103			
Rating of how things are going in job	.060	.015			
Rating of how things going in family	.183**	058			
Rating of how things are in personal life	.186**	.166			
Rating of nation today	.269**	.169			

Table 1: Hierarchical Multiple Regression Predicting a Positive Future Role of the Internet continued

Block					
Independent Variable	r	Final β	Inc. R <sup>2</sup>	F	p
6. Public Opinion			.108	.971	.497
Clinton doing good job as President	.017	073			
Mike White doing good job as Mayor	.149*	.188			
Clinton should be removed from office	.002	.014			
Too much coverage of Clinton impeach	.008	142			
Too much coverage of M. Lewinsky	008	.049			
Believe O.J. innocent of murder	066	.155			
Abortion should remain legal	.171**	.124			
Concerned that I will get AIDS	.089	093			
Gov. should guarantee health care	011	.053			
Need more gun control	.012	.043			
Affirmative action still necessary	.073	.145			
I have been race discriminated against	006	032			
African Americans are discriminated	062	140			
AfAms. have less education opps.	.082	001			
I suffer from information overload	.095	.144			
Rock Hall has improved Cle. image	.187**	157			
Drew Carey has improved Cle. image	.182**	.156	, ,		
7. Affective Filters			.024	.506	.827
Mean-Spirited humor	.047	161			
Visual/Verbal humor	.053	026			
Absurd/Stupid humor	.105	.002			
Social humor	.067	008			
Satire/Death humor	.066	.048			
20-item depression index	185**	109			
10-item wallowing index	020	057			
TOTAL EQUATION		Adjusted	$R^2 = .435$ $R^2 = .047$	F (57,83) = 1.122	p = .313

<sup>\* -</sup> p<.05; \*\* - p<.01

Table 2: Hierarchical Multiple Regression Predicting the Perception that the Internet Invades Privacy

Block					
Independent Variable	<u> </u>	Final β	Inc. R <sup>2</sup>	<u> </u>	p
1. Social Categories			.149	2.871	.006
Age	.247**	.158			
Education	083	.014			
Gender (female)	.243**	.185*			
Income	207**	202*			
Marital Status (married)	.068	.102			
Political Ideology (liberal)	003	.026			
Political Party Affiliation (republican)	035	.083			
Race/Ethnicity (non-white)	.137*	.207*			
2. Media Use			.114	2.728	.011
Television	.135*	.203*			
Radio	085	231**			
Newspaper	003	143			
Magazines	001	.076			
Books	.039	005			
Videos	026	022			
Movies	031	.050			
3. New Technology Use			.014	1.166	.315
E-Mail	106	070			
Internet	182**	102			
4. Technology Adoption			.050	.825	.605
VCR	021	.130			
CD Player	084	056			
DVD Player	026	016			
Laserdisc Player	078	065			
Camcorder	050	057			
Cable TV	103	.006			
Satellite Dish	076	.070			
Cellular Phone	112	089			
Computer	215**	149			
Eagerness to get DTV	074	.001			
5. QOL Assessments			.044	1.222	.301
Rating of [metropolitan] area	022	.009			
Rating of neighborhood lived in	.062	.222			
Rating of how things are going in job	.001	.060			
Rating of how things going in family	.034	.008			
Rating of how things are in personal life	079	159			
Rating of nation today	101	107			

**Table 2: Hierarchical Multiple Regression Predicting the Perception that the Internet Invades Privacy** continued

Block					
Independent Variable	r	Final β	Inc. R <sup>2</sup>	F	<u> </u>
6. Public Opinion			.097	.948	.522
Clinton doing good job as President	.052	.128			
Mike White doing good job as Mayor	006	151			
Clinton should be removed from office	057	.124			
Too much coverage of Clinton impeach	.047	030			
Too much coverage of M. Lewinsky	.090	103			
Believe O.J. innocent of murder	.153**	.055			
Abortion should remain legal	118*	037			
Concerned that I will get AIDS	030	.093			
Gov. should guarantee health care	.189**	.032			
Need more gun control	.174**	.146			
Affirmative action still necessary	.164**	.112			
I have been race discriminated against	.093	.185			
African Americans are discriminated	053	.064			
AfAms. have less education opps.	.092	008			
I suffer from information overload	.050	049			
Rock Hall has improved Cle. image	.154**	.023			
Drew Carey has improved Cle. image	.115	.044			
7. Affective Filters			.129	3.735	.001
Mean-Spirited humor	233**	039			
Visual/Verbal humor	064	.037			
Absurd/Stupid humor	015	217*			
Social humor	.069	.274*			
Satire/Death humor	160**	028			
20-item depression index	.116*	.249*			
10-item wallowing index	.154**	.356**			
TOTAL EQUATION			$R^2 = .595$	F (57,82)	p = .001
		Adjusted	$R^2 = .314$	= 2.117	

<sup>\* -</sup> p<.05; \*\* - p<.01

Table 3: Hierarchical Multiple Regression Predicting the Internet Providing Lots of Useful Information

Block					
Independent Variable	r	Final β	Inc. R <sup>2</sup>	F	<u> </u>
1. Social Categories			.199	4.122	<.001
Age	247**	210*			
Education	.000	078			
Gender (female)	133*	.098			
Income	.260**	.377**			
Marital Status (married)	.046	014			
Political Ideology (liberal)	.054	.183*	The state of the s		
Political Party Affiliation (republican)	.123*	.098			
Race/Ethnicity (non-white)	070	009			
2. Media Use			.044	1.054	.397
Television	.048	.111			
Radio	064	045	-		
Newspaper	033	.150	Q		
Magazines	.045	.039			
Books	034	084			
Videos	.130*	.009			
Movies	.074	137			
3. New Technology Use			.030	2.526	.084
E-Mail	.056	083			
Internet	.260**	.182*			
4. Technology Adoption			.092	1.642	.103
VCR	.154**	.002			
CD Player	.218**	.082			
DVD Player	.045	020			
Laserdisc Player	.107	.049			
Camcorder	.249**	.173			
Cable TV	007	221*			
Satellite Dish	.091	049			
Cellular Phone	.207**	.105			
Computer	.239**	.096			
Eagerness to get DTV	.165**	.139			
5. QOL Assessments			.047	1.424	.212
Rating of [metropolitan] area	.062	.077			
Rating of neighborhood lived in	.038	214			
Rating of how things are going in job	.051	.025			
Rating of how things going in family	.230**	.139			
Rating of how things are in personal life	.203**	.120			
Rating of nation today	.181**	.074			

**Table 3: Hierarchical Multiple Regression Predicting the Internet Providing Lots of Useful Information** continued

Block					
Independent Variable	r	Final β	Inc. R <sup>2</sup>	F	p
6. Public Opinion			.150	1.825	.036
Clinton doing good job as President	.068	029			
Mike White doing good job as Mayor	.152**	.019			
Clinton should be removed from office	.057	.168			
Too much coverage of Clinton impeach	.096	126			
Too much coverage of M. Lewinsky	.070	.212			
Believe O.J. innocent of murder	063	.089			
Abortion should remain legal	.022	.119			
Concerned that I will get AIDS	.104	007			
Gov. should guarantee health care	.023	.153			
Need more gun control	.089	.089			
Affirmative action still necessary	.004	.050			
I have been race discriminated against	038	136			
African Americans are discriminated	053	.017			
AfAms. have less education opps.	115*	054			
I suffer from information overload	.120*	.066			
Rock Hall has improved Cle. image	.270**	.231			
Drew Carey has improved Cle. image	.117	.059			
7. Affective Filters			.059	1.850	.088
Mean-Spirited humor	.101	086			
Visual/Verbal humor	.205**	.109			
Absurd/Stupid humor	.105	.012			
Social humor	.202**	.167			
Satire/Death humor	004	121			
20-item depression index	161**	170			
10-item wallowing index	029	020			
TOTAL EQUATION			$R^2 = .619$	F (57,84)	p < .001
		Adjusted	$R^2 = .361$	= 2.397	

<sup>\* -</sup> p<.05; \*\* - p<.01

Table 4: Hierarchical Multiple Regression Predicting the (positive) Internet Public Opinion Index

Block					
Independent Variable	<u> </u>	Final β	Inc. R <sup>2</sup>	F	p
1. Social Categories			.190	3.806	<.001
Age	324**	147			
Education	.055	061			
Gender (female)	267**	167*			
Income	.276**	.316**			
Marital Status (married)	051	111			
Political Ideology (liberal)	.062	.058			
Political Party Affiliation (republican)	.079	035			
Race/Ethnicity (non-white)	140*	189*			
2. Media Use			.056	1.307	.252
Television	056	072			
Radio	.007	.160			
Newspaper	026	.181			
Magazines	.038	.013			
Books	065	067			
Videos	.112	.080			
Movies	.118*	075			
3. New Technology Use			.023	1.863	.160
E-Mail	.131*	.039			
Internet	.260**	.160			
4. Technology Adoption			.082	1.396	.191
VCR	.119*	049			
CD Player	.209**	.100			
DVD Player	.017	047			
Laserdisc Player	.123*	.051			
Camcorder	.169**	.109			
Cable TV	.009	200*			
Satellite Dish	.136*	029			
Cellular Phone	.194**	.131			
Computer	.273**	.145			
Eagerness to get DTV	.175**	.083			
5. QOL Assessments			.063	1.885	.090
Rating of [metropolitan] area	.092	015			
Rating of neighborhood lived in	.003	225			
Rating of how things are going in job	.032	054			
Rating of how things going in family	.137*	.031			
Rating of how things are in personal life	.184**	.197			
Rating of nation today	.243**	.180*			

**Table 4: Hierarchical Multiple Regression Predicting the (positive) Internet Public Opinion Index** continued

Block					
Independent Variable	r	Final β	Inc. R <sup>2</sup>	· F	р
6. Public Opinion			.080	.822	.664
Clinton doing good job as President	.014	100			
Mike White doing good job as Mayor	.131*	.153			
Clinton should be removed from office	.033	.004			
Too much coverage of Clinton impeach	.016	127			
Too much coverage of M. Lewinsky	016	.180			
Believe O.J. innocent of murder	111	.065			
Abortion should remain legal	.145*	.120			
Concerned that I will get AIDS	.094	065			
Gov. should guarantee health care	088	.044			
Need more gun control	061	040			
Affirmative action still necessary	033	.040			
I have been race discriminated against	052	160			
African Americans are discriminated	087	094			
AfAms. have less education opps.	027	009			
I suffer from information overload	.066	.111			
Rock Hall has improved Cle. image	.137*	.014			
Drew Carey has improved Cle. image	.065	.070			
7. Affective Filters			.074	1.996	.070
Mean-Spirited humor	.177**	100			
Visual/Verbal humor	.131*	.015			
Absurd/Stupid humor	.103	.109			
Social humor	.069	083			
Satire/Death humor	.114*	010			
20-item depression index	190**	247*			
10-item wallowing index	099	207			
TOTAL EQUATION			$R^2 = .567$	F (57,81)	p = .005
* - n< 05· ** n< 01	*****	Adjusted	$R^2 = .263$	= 1.863	J

<sup>\* -</sup> p<.05; \*\* - p<.01