An Expanded Analysis of Internet Dependencies by Demographic Variables

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Abstract

This study presents an expanded review of Internet use in the US and the possibility of an unhealthy Internet dependence that may have developed. In this analysis of Pew Internet Research data, we review the relative strength of this dependence, and we explore how it varies by income, education, age, gender, and community type. The manuscript explores the concept of Internet addiction, the extent of our dependence and explores the literature on both Internet addiction and how past studies have found some demographic differences. This detailed study statistically reviews key demographic variables and also interaction effects among age and gender.

1. INTRODUCTION

The Internet has become a dominant activity in our society. We constantly rely on the Internet for all types of information, from directions to dictionaries. According to Internet World Stats (2015), 88% of North America is online. Our online activity is so prevalent many it has been suggested that we are seeing a new disorder develop, Internet addiction. We may be addicted to the Internet (Griffiths, 2000). The Internet has become our link to the world, our communication device, our source of information, even a source and facilitator of relationships.   But how strong is this dependence? There have been many studies which have begun to examine this dependency. In this analysis of Pew Internet Research data, we review the relative strength of Internet dependence and we explore how it varies by age, gender, income, education, and community type. It is important to understand the extent of Internet dependence. Some have seen Internet addiction as a disorder and others see may see an over reliance on external knowledge to the sacrifice of learned knowledge. Either way an exploration of the extent of this dependence is warranted.

2. RESEARCH METHODOLOGY

Our research centered upon the following research questions: Can we live without the Internet? What is the extent of Internet usage and dependence and how does it vary by demographic variables in the US. The Pew study and report examined overall responses to Internet usage, however, they did not examine nor explore demographic differences in Internet usage. In order to fully understand the variances in Internet dependence, a variety of research hypotheses are proposed. The demographic variables chosen are very common and the literature review provides evidence of each as worthy variables for study.

The research hypotheses to be tested are as follows:

H_1: Internet dependence as measured by difficulty of giving up the Internet exists in the US.

H_2: Internet dependence will show significant difference based on Income

H$_3$: Internet dependence will show significant difference based on Education

H$_4$: Internet dependence will show significant difference based on Age and Gender

H$_5$: Internet dependence will show significant difference based on Community Type

3. LITERATURE REVIEW

Demographics

Busselle, R., Reagan, J., Pinkleton, B., & Jackson, K. (1999) found "two of the demographics are significant, younger males use the Internet more often. Gender and age were significant demographic predictors of use, younger males being heavier users." Neither education nor income were significant. But his sample of faculty and staff may have skewed demographic conclusions. Porter and Donthu (2006) studied attitudes towards Internet usage and demographics. They examined the demographic categories of age, education, and income, They found that older individuals have lower perceived ease of use and thus a less positive attitude towards the Internet. They also found that less educated individuals have lower perceived ease of use. With regard to income, lower income individuals found the Internet as more costly affecting attitude towards Internet use.

Talukdar and Gauri (2011) performed a comprehensive study of Home Internet Usage and Socio-economic status in a 2011 study for the Communications of the Association for Information Systems. Their longitudinal study found that a differences exists along many socio-economic variables and that it has even widened between 2002 and 2008. They studied income, education, gender, age, and residential location. They found significant differences in all these demographic categories in both 2002 and 2008, in Internet access and daily internet usage. Higher access and usage were found for:

Higher income	Internet access increased
More education	Daily usage increased
Male	Same
White Americans	Internet access increased relative to other races
Older age	Same
Urban resident	Internet Access and Daily Internet Usage Increased versus rural

Hu, Zhang, Dai, and Zhang (2011) used a logistic regression analysis to find gender differences in college students' perception of the internet. They found that males had higher levels of Internet self-efficacy, experience and information overload versus females. Self-efficacy was a measured factor and included statements on proficiency, ease, confidence, and good skills. Experience was measured by hours of use. Information overload was measured by too much information and more information than they could interpret.

Castleton, K., Fong, T., Wang-Gillam, A., Waqar, M. A., Jeffe, D. B., Kehlenbrink, L, Gao & Govindan, R. (2011) performed a detailed demographic analysis of cancer patients who searched the Internet for information about their cancer. They performed chi square analysis based on age, gender, and education. They found significant differences in each demographic category except gender. Younger patients (<59) searched the Internet for cancer information more than older patients. And generally more education resulted in more Internet access. There was no significant difference between Males and Females.

Teo (2001) studied demographic variables associated with Internet usage activities. He studied gender, age, and educational levels. He found that males were more likely to engage in browsing and downloading activities versus females but messaging activities showed no difference. Age differences depended on specific activity. Older individuals used the Internet more for purchases but younger individuals messaged and downloaded more than older individuals. Education level was positively correlated to higher usage.

van Deursen, A. J., & Van Dijk, J. A. (2014) studied a variety of demographic factors and Internet usage in Holland. They used multiple linear regression analysis and studied gender, age, education, income, and residency. They found significant greater amount of Internet use for males versus females, less usage for ages 50-64, and higher usage for urban dwellers versus rural. Their findings in one way were different than most studies. They found that in the Netherlands lower levels of education lead to higher overall Internet usage (social interaction and gaming). Household income had no significant impact. Baturay and Toker (2015) found that males engage in cyberloafing to a greater extent than females. Cyberloafing was

defined as using the Internet at work for personal purposes.

According to Nie and Ehring (2000) "the most important factor facilitating or inhibiting Internet access are education and age, and not income – nor gender, each of which account for less than 5 percent change in rates of access and are statistically insignificant.

Joiner, R., Gavin, J., Brosnan, M., Cromby, J., Gregory, H., Guiller, J. and Moon, A. (2012) performed a follow up study on gender differences in Internet usage in 2012. Their first study was in 2002 and found that males had a "greater breadth" of Internet use versus females. Their follow up study they found that things had changed with regard to Internet usage. Males still had greater breadth of usage but now found that females use the Internet for communications and social networking more than males. Cherry, J., Clinton, M., & Tillotson, J. (2013) found predominately male users at the University of Toronto library.

Duggan, M., & Brenner, J. (2013) analyzed other Pew survey data and found age, and gender play significant roles in social media use with younger individuals, and females showing strong interest in social media.

Table 1 Internet Use and Demographics

Author	Year	Age	Gender	Education	Income	Community Type
Porter and Donthu	2006	S		S	S	
Talukdar and Gauri	2011	S	S	S	S	S
Castleton et al.	2011	S	NS	S		
Van Deursen et al.	2014	S	S	S	NS	S
Baturay and Toker	2015		S			
Nie and Ehring	2000	S	NS	S	NS	
Duggan and Brenner	2013	S	S			
Hosein Jafarkarimi, Alex Tze Hiang Sim, Robab Saadatdoost, and Jee Mei Hee	2016	NS	NS	NS	NS	
Busselle, R., Reagan, J., Pinkleton, B., & Jackson, K.		S	S	NS	NS	

S=significant, NS=Not Significant, and Blank=Not tested in this study

A summary of the demographics literature (Table 1) shows that age when tested is consistently a significant variable in Internet usage whereas gender and income and education have shown mixed results.

Internet Addiction and Abuse.
There has also been some studies on the concept of Internet abuse and addiction. According to Christakis, D. A., & Moreno, M. A. (2009) estimates are that 4% of Korean children, 15% of Chinese youth, and 1 in 8 of American adults are addicted to the Internet. The author suggest that all existing behaviors or substances that lead to addiction have social or legal constraints (alcohol, gambling etc.). He suggests there may be a problem that needs to be dealt with. Young suggested in 1998 that Internet Addiction may be emerging as a new clinical mental disorder. She suggests that it most similar to pathological gambling. In 1996 Griffiths found that behavioral addictions do exist and should be treated no differently from the better-known chemically based addictions. Then Griffths (2000) suggested "The time has come for the addiction research community to take Internet addiction seriously.

Brenner (1997) also suggests that Internet addiction is a topic that needs to be addressed. Most of users he surveyed suggest that there have been instances where Internet usage has interfered with other aspects of their lives. Chao and Hsiao (2000) studied Taiwanese college students and found 54 instances of Internet addiction out of 910 students. They found that males were significantly more likely to the Internet addicts than females. Shin (2014) studied Korean and US mobile Internet users. Shin found that Koreans are more "Internet dependent" than US users. He also found that students, unemployed, and younger students are more likely to be Internet dependent. He also found Korean women as being particularly susceptible to Internet dependence. He found no such gender difference in US mobile users. Gencer and Koc (2012) studied 1380 high school students in Turkey and found that males were more likely to experience "Internet abuse" than females. Internet abuse was defined by author as "excessive use, … preoccupation with the Internet, and using the Internet to escape from negative feelings".

Hosein Jafarkarimi, Alex Tze Hiang Sim, Robab Saadatdoost, and Jee Mei Hee (2016) found in their study of Malaysian students that according to the Bergen Facebook Addiction Scale (BFAS), 47% of respondents were addicted to Facebook. They also found no demographic differences based on age, gender, religion, income, or education. The BFAS were used in this study to measure Facebook addiction. This scale contains six questions on 5 Likert Scale basis

each reflecting a dimension of six basic components of addiction (salience, mood modification, tolerance, withdrawal, conflict and relapse). "BFAS asks the respondents to answer how often during last year they have experienced the following: "1. Spent a lot of time thinking about Facebook or planned use of Facebook", "2. Felt an urge to use Facebook more and more, "3. Used Facebook in order to forget about personal problems", "4. Tried to cut down on the use of Facebook without success", "5. Become restless or troubled if you have been prohibited from using Facebook." And "6.Used Facebook so much that it has had a negative impact on your job/studies. "Respondents have 5 options ranging from very rarely to very often". Morahan-Martin, J., & Schumacher, P. (2000) found one-quarter of students (27.2%) reported no symptoms of pathological Internet use while 64.7% reported one to three symptoms (Limited Symptoms) and 8.1% reported four or more symptoms.

Emmanouilides, C., & Hammond, K. (2000) studied predictors of active users and frequency of use and found many reasons for heavier usage but did not study demographics. Amichai-Hamburger, Y., & Hayat, Z. (2011) found that contrary to popular opinion, the Internet does not lead to isolation and loneliness. Rather they found in a study across 13 countries and 22,002 participants that Internet usage can actually enhance social lives of users. Armstrong, L., Phillips, J. G., & Saling, L. L. (2000) studied Internet addiction and its proposed construct derived from DSM-IV which provides a psychological construct for substance abuse. They found that low self-esteem leads to excessive Internet use. They suggest the male, highly educated stereotype of Internet addict be reassessed. LaRose, R., Lin, C. A., & Eastin, M. S. (2003) also examined Internet addiction and found that addiction was not isolated to specific activities but "significantly and positively correlated to Internet across the entire range of consumption". It does however also correlate to depression and habits formed to deal with depression.

4. RESEARCH METHODOLOGY

The results in this report are based on data from telephone interviews conducted by Princeton Survey Research Associates International from January 9-12, 2014, among a sample of 1,006 adults, age 18 and older. Telephone interviews were conducted in English and Spanish by landline and cell phone. For results based on the total sample, one can say with 95% confidence that the error attributable to sampling is plus or minus 3.5 percentage points. For results based on internet users (N=857), the margin of sampling error is plus or minus 3.9 percentage points.

Pew Research Center is the source of the data, and the authors acknowledge that the Center bears no responsibility for the interpretations presented or conclusions reached based on analysis of the data. Duggan and Brenner(2013). All results were processed using IBM SPSS 22.0. This work is an extension of work performed by the author earlier this year. (Peslak, 2015)

5. RESULTS

Overall
Before we explore each individual demographic hypothesis, we first must examine whether there is an overall Internet dependence in our overall population. The questions analyzed first then is what are the existence of Internet dependence in the US is today and how strong is this dependence.

H_1:   Internet dependence as measured by difficulty of giving up the Internet exists in the US.

Table 2 presents the mean and quartiles for question PIAL5d in the survey. This question will serve as our main dependent variable in this study and reads:

PIAL5 How difficult would it be, if at all, to give up the following things in your life? If you do not use or have the item, just tell me. How hard would it be for you to give up (The internet 1=Very Hard, 2=Somewhat Hard, 3=Not Too Hard, 4=Not Hard at all). (Duggan and Brenner, 2013). There were also some volunteered answers in the study which are noted as VOL. These volunteered answers were not included in any significance analyses.

Table 2 shows that the mean is 1.92 which is more than Somewhat Hard. But Table 3 is the Difficulty Frequency Table and shows that 52.2% of those surveyed and had valid responses found it Very Hard to Give Up the Internet. With over one half of the surveyed population expressing that it would be "very hard" to give up the Internet and another 17% finding it somewhat hard, we believe that an Internet dependency exists in the US. Based on this percentage we believe that hypothesis 1 is supported.

A binomial nonparametric test (table 4) was performed to see if this percentage is statistically significant. We used 5% as our test proportion and found that 52% is significantly over .05 at p < .000. Therefore we conclude that Hypothesis 1 is supported. The 52% of the population who view it very hard to give up the Internet is not due to chance. Internet dependence exists in the US and is prevalent in over 50% of the population.

Table 2 Give Up Internet Statistics

PIAL5d How difficult would it be, if at all, to give up the following things in your life? If you do not use or have the item, just tell me. How hard would it be for you to give up… – The Internet

N	Valid	2669
	Missing	413
Mean		1.92

Table 3 Difficulty Frequency table

		Frequency	Valid Percent	Cumulative Percent
Valid	Very hard	1394	52.2	52.2
	Somewhat hard	528	19.8	72.0
	Not too hard	398	14.9	86.9
	Not hard at all	308	11.5	98.5
	Impossible	20	.8	99.2
	Do not use / Do not have	13	.5	99.7
	Don't know	5	.2	99.9
	Refused	2	.1	100.0
	Total	2669	100.0	
Missing	System	413		
Total		3082		

Income

In most situations, the Internet costs money. Though there are free wi-fi hot spots in coffee shops or the library, for the most part people have to subscribe to an Internet Service Provider to access the Internet. As a result it would be assumed that Internet use and dependence would vary based on income, with higher income resulting in more Internet use. Past studies have shown mixed results on Internet use and the effect of income. Porter and Donthu (2006) and Talukdar (2011) found significant influence on Internet use with higher income resulting in higher usage and dependency. Van Duesen and Nie (2014) however did not find significant

influence. As shown in table 5, in general higher levels of income resulted in higher Internet dependence. A regression analysis (table 6) shows differences to be significant at p < .001. A review of the crosstab table (table 5 and Appendix Table 1) shows that in general higher income results in greater difficulty in giving up the Internet. For those earning less than $75,000 the highest percentage is 49.4% but for those over $75,000, all are much higher with those making over $150,000 a staggering 75.3% who would find it very hard to give up the Internet. Hypothesis 2 is supported.

Table 4 Binomial Test

		Category	Obser Prop.	Test Prop.	Sig. (1-tailed)
How difficult to give up… - The Internet	1	<= 1	.52	.05	.000
	2	> 1	.48		
	Tot		1.00		

Table 5 Very Hard to Give up % for each Income Level

INC. Last year - that i		Very hard	
	Less than	64	33.70%
	$10,000 to	109	47.00%
	$20,000 to	159	49.40%
	$30,000 to	116	44.60%
	$40,000 to	84	39.30%
	$50,000 to	181	46.80%
	$75,000 to	191	59.30%
	$100,000 t	156	68.70%
	$150,000 o	165	75.30%
	Don't kno	169	57.10%
	Total	1394	52.20%

Table 6 Regression AgeGroup * Difficulty

		Standardized Coefficients	
Model		Beta	Sig.
1	(Constant)		.000
	AgeGroup	.097	.000

Education

Nearly study in our literature search found that educational level has a significant and positive effect on difficulty with giving up the Internet with the exception of the Dutch study (Van Duesen) which found a significant but negative relationship with education. Our study confirms what nearly all past studies have found, that there is a significant difference between education level and Internet dependence and that Internet dependence increases with education.

Table 7 Very Hard to Give up % for each Education Level

EDUC2. What is the highest level of	Very hard	
	Count	%
Less than high school (Gra	11	17.50%
High school incomplete (	31	36.00%
High school graduate (Gra	363	44.40%
Some college, no degree	315	53.50%
Two year associate degre	139	49.50%
Four year college	322	64.00%
Some postgraduate or pro	11	64.70%
Postgraduate or professio	194	66.70%
Don't know/Refused	8	38.10%
Total	1394	52.20%

Table 8 Regression Education Level * Difficulty

Model	Standardized Coefficients	
	Beta	Sig.
1 (Constant)		.000
EDUC2. What is the highest level of school you have completed or the highest degree you have received? [DO NOT READ]	-.175	.000

Our study shows rising difficulty in giving up the Internet. Table 7 shows the percentage of respondents who saw giving up the Internet as Very Hard by Education Level (full results for each category are in Appendix table 2). Only 17.5% of those with less than an 8th grade education would find it Very Hard to give up the Internet. This doubles to 36% for those with some high school and 44% for those with a high school diploma. College increases this dependence with 2 year degrees and some college at 50% and 54% respectively. Four year

college graduates rise to 64% and post graduate degrees move this dependence even higher. Education level has a significant impact on Internet dependence. Regression Analysis (table 8) finds the differences significant at p < .001. Hypothesis 3 is supported.

Age and gender

Studies of the impact of age have nearly all shown that age has a significant and negative impact on Internet use. In other words the older you are, the less you use the Internet. Studies of gender however have been mixed. We have also studied this relationship in a prior published study but in this manuscript we explore in addition whether there are interaction effects between age and gender. A Univariate ANOVA was performed to examine the direct relationships between age, gender and difficulty in giving up the Internet. Age ranges were used to facilitate post hoc analysis. Table 9 shows the Descriptive Statistics associated with gender and Age range. Total male and female scores are at 2.06 and 1.79 respectively suggesting females would have a more difficult time giving up the Internet. This is a bit surprising since many past studies have found significantly higher usage by males. Duggan and Brenner (2013) did find however higher usage by females due to social media. This may be the reason for the findings in our study. As the Internet moves toward more social activity and support, females who tend to be more social may be more attached to the Internet. Table 10 which shows the analysis of Test of Between-Subjects Effects and shows the main effect of gender to be significant with a p value < .001, clearly showing a significant difference. In addition, a review of the descriptive statistics seems to suggest a lower level of difficulty with increasing age with 1.82 at ages 18-25 but 2.06 over 65. This is again is born out in the ANOVA with just age range significant at p < .001. Age does play a role in Internet dependency. The interaction effect was also measured in the ANOVA and the combination of Age Range were found to be significant at p < .10, with an actual p value of .057. Chart 1 shows each age group and the differences between genders. For all age groups, males would have less difficulty than females but for the highest age group, >65, there is little difference. A very large difference exists in the 36-45 age group. This may be due to a social difference where more women may be at home raising children and thus relying on the Internet for more for social activity. Further study is warranted to explore this relationship. Post hoc analysis in table 11 suggests that significant

differences for age groups lie in the 18-25 and 46-55 group and the 56-65 group. For the 26-35 group significant differences are indicated versus age groups 46-55, 56-65 and over 65. Hypothesis 4 is supported.

Table 9 Age and Gender Descriptive Statistics

Dependent Variable: PIAL5d How difficult would it be, if at all, to give up - The Internet

GENDER. Respondent's gender	AgeGroup	Mean	Std. Deviation	N
Male	18-25	1.94	1.104	262
	26-35	1.81	1.182	223
	36-45	2.21	1.278	203
	46-55	2.18	1.117	244
	55-65	2.16	1.267	201
	>65	2.07	1.558	188
	Total	2.06	1.250	1321
Female	18-25	1.69	1.056	234
	26-35	1.59	.877	233
	36-45	1.65	.925	291
	46-55	1.91	1.322	254
	55-65	1.99	1.177	216
	>65	1.98	.997	157
	Total	1.79	1.081	1385
Total	18-25	1.82	1.088	496
	26-35	1.70	1.042	456
	36-45	1.88	1.118	494
	46-55	2.04	1.232	498
	55-65	2.07	1.223	417
	>65	2.03	1.331	345
	Total	1.92	1.174	2706

Table 10 AgeGroup * Gender F test

Source	F	Sig.
Corrected Model	7.616	.000
Intercept	7336.634	.000
gender	33.044	.000
AgeGroup	7.262	.000
gender * AgeGroup	2.147	.057
Error		
Total		
Corrected Total		

Table 11 AgeGroup Post Hoc Tests

(I) AgeGroup	(J) AgeGroup	Mean Difference (I-J)	Std. Error	Sig.
18-25	26-35	.13	.075	1.000
	36-45	-.06	.074	1.000
	46-55	-.22*	.074	.047
	5.00	-.25*	.077	.020
	>65	-.20	.081	.179
26-35	18-25	-.13	.075	1.000
	36-45	-.18	.075	.225
	46-55	-.34*	.075	.000
	5.00	-.37*	.079	.000
	>65	-.33*	.083	.001
36-45	18-25	.06	.074	1.000
	26-35	.18	.075	.225
	46-55	-.16	.074	.423
	5.00	-.19	.077	.196
	>65	-.15	.081	1.000
46-55	18-25	.22*	.074	.047
	26-35	.34*	.075	.000
	36-45	.16	.074	.423
	5.00	-.03	.077	1.000
	>65	.01	.081	1.000
5.00	18-25	.25*	.077	.020
	26-35	.37*	.079	.000
	36-45	.19	.077	.196
	46-55	.03	.077	1.000
	>65	.04	.084	1.000
>65	18-25	.20	.081	.179
	26-35	.33*	.083	.001
	36-45	.15	.081	1.000
	46-55	-.01	.081	1.000
	>65	-.04	.084	1.000

Chart 1

Estimated Marginal Means of PIAL5d How difficult would it be, if at all, to give up the following things in your life? If you do not use or have the item, just tell me. How hard would it be for you to give up... - The Internet
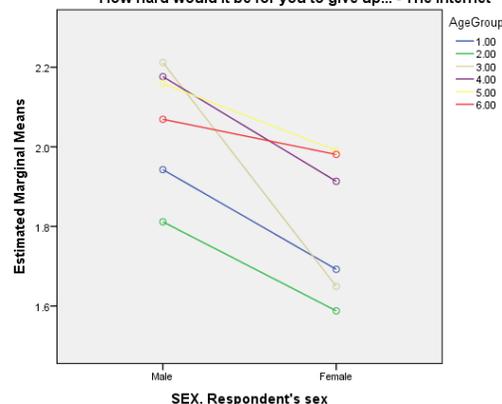
Community type

The last variable studied is community type. Limited past studies have shown a significant variance in Internet usage based on community type. Both studies found that urban residents had higher Internet usage. Table 12 shows that 52% of Suburban residents would find it very hard to give up the Internet. Full results are shown in Appendix table 3. Our study reviews urban, rural, and suburban residents via a chi-square analysis. Results show that there are significant differences between the community groups at $p < .001$ (table 13). In order to find where these differences existed, t-test of means of independent samples were performed. These found that there were significant differences between Urban and Suburban at $p < .064$ (table 14), with Suburban users having greater Internet dependency. The differences were more significant between Suburban and Rural ($p < .001$) (Table 15) and Urban and Rural ($p < .003$) (Table 16). In both cases Rural showed less dependency. Hypothesis 5 is supported.

Table 12 Very Hard to Give up % for each Community Type

			Very hard
Communi Rural		Count	172
		%	12.30%
	Suburban	Count	728
		%	52.30%
	Urban	Count	493
		%	35.40%
Total		Count	1393
		%	100.00%

Table 13 Community Type * Difficulty Statistics

CommType	Mean	N	Std. Deviation
Urban	1.93	927	1.275
Suburban	1.84	1330	1.096
Rural	2.15	413	1.179
Total	1.92	2669	1.178

Chi Square $p < .001$

Table 14 Urban versus Suburban

	CommType	N	Mean	Std. Deviation	Std. Error Mean
PIAL5d	1.00	927	1.93	1.275	.042
	2.00	1330	1.84	1.096	.030

$p < .064$

Table 15 Suburban versus Rural

	CommType	N	Mean	Std. Deviation	Std. Error Mean
PIAL5d	2.00	1330	1.84	1.096	.030
	3.00	413	2.15	1.179	.058

$p < .001$

Table 16 Urban Versus Rural

	CommType	N	Mean	Std. Deviation	Std. Error Mean
PIAL5d	1.00	927	1.93	1.275	.042
	3.00	413	2.15	1.179	.058

$p < 003$

6. CONCLUSIONS

Our report analyzes a detailed and scientific sample cross section of the US population based on the Pew Internet survey. Our results found that Internet dependence appears to be a real phenomenon with over 50% of the population finding it Very Hard to give up the Internet. This rate rises when age is factored into the equation. Fully 78% of 18-25 year olds would

find it Very Hard to give up the Internet. With regard to hypotheses, Income, Education Level, Age, Gender, Interaction of Age and Gender and Community type were found to be significant variables influencing Internet dependence. Higher educated, higher income, younger Americans, females, and Suburban dwellers were found to be more dependent. This high dependence and demographic profile presents important information for researchers and practitioners. Further study is recommended to determine whether these recognized dependencies are a threat. Further study between professional versus personal use is called for and the affect it may be having needs exploration. If found to have negative affect, the demographic analyses can then be used to target potential behavioral modification efforts.

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APPENDIX

Appendix Table 1 Full Income Crosstab

	INC. Last year - that is, in 2013 - approximately what was your total family income before taxes? Just tell me when I get to the right category. (READ)										
	Less than $10,000	$10,000 to under $20,000	$20,000 to under $30,000	$30,000 to under $40,000	$40,000 to under $50,000	$50,000 to under $75,000	$75,000 to under $100,000	$100,000 to under $150,000	$150,000 or over	Don't know/Refused (VOL.)	Total
Very hard	64 33.7%	109 47.0%	159 49.4%	116 44.6%	84 39.3%	181 46.8%	191 59.3%	156 68.7%	165 75.3%	169 57.1%	1394 52.2%
Somewhat hard	44 23.2%	35 15.1%	63 19.6%	55 21.2%	49 22.9%	97 25.1%	74 23.0%	12 5.3%	24 11.0%	76 25.7%	529 19.8%
Not too hard	41 21.6%	36 15.5%	48 14.9%	43 16.5%	48 22.4%	74 19.1%	30 9.3%	36 15.9%	13 5.9%	28 9.5%	397 14.9%
Not hard at all	36 18.9%	49 21.1%	42 13.0%	46 17.7%	29 13.6%	31 8.0%	21 6.5%	20 8.8%	17 7.8%	17 5.7%	308 11.5%
(VOL.) Count Impossible	0 0.0%	3 1.3%	5 1.6%	0 0.0%	1 0.5%	2 0.5%	6 1.9%	3 1.3%	0 0.0%	0 0.0%	20 0.7%
(VOL.) Do not use / Do not have	0 0.0%	0 0.0%	5 1.6%	0 0.0%	3 1.4%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	6 2.0%	14 0.5%
(VOL.) Count Don't know	5 2.6%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	5 0.2%
(VOL.) Count Refused	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 0.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 0.1%
Total	190 100.0%	232 100.0%	322 100.0%	260 100.0%	214 100.0%	387 100.0%	322 100.0%	227 100.0%	219 100.0%	296 100.0%	2669 100.0%

Appendix Table 2 Full Education Crosstab Crosstabulation

		EDUC2. What is the highest level of school you have completed or the highest degree you have received? [DO NOT READ]									
		Less than high school (Grades 1-8 or no formal schooling)	High school incomplete (Grades 9-11 or Grade 12 with NO diploma)	High school graduate (Grade 12 with diploma or GED certificate)	Some college, no degree (includes some community college)	Two year associate degree from a college or university	Four year college	Some postgraduate or professional schooling, no postgraduate degree	Postgraduate or professional degree, including master's, doctorate, medical or law degree	Don't know/Refused	Total
Very hard	Count	11	31	363	315	139	322	11	194	8	1394
	%	17.5%	36.0%	44.4%	53.5%	49.5%	64.0%	64.7%	66.7%	38.1%	52.2%
Some what hard	Count	9	17	131	157	62	96	0	53	2	527
	%	14.3%	19.8%	16.0%	26.7%	22.1%	19.1%	0.0%	18.2%	9.5%	19.8%
Not too hard	Count	26	10	183	51	53	51	1	22	0	397
	%	41.3%	11.6%	22.4%	8.7%	18.9%	10.1%	5.9%	7.6%	0.0%	14.9%
Not hard at all	Count	13	28	127	58	25	30	2	20	6	309
	%	20.6%	32.6%	15.5%	9.8%	8.9%	6.0%	11.8%	6.9%	28.6%	11.6%
(VOL.) Impossible	Count	0	0	3	8	2	2	3	2	0	20
	%	0.0%	0.0%	0.4%	1.4%	0.7%	0.4%	17.6%	0.7%	0.0%	0.7%
(VOL.) Do not use / Do not have	Count	4	0	10	0	0	0	0	0	0	14
	%	6.3%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%
(VOL.) Don't know	Count	0	0	0	0	0	0	0	0	5	5
	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23.8%	0.2%
(VOL.) Refused	Count	0	0	0	0	0	2	0	0	0	2
	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.1%
Total	Count	63	86	817	589	281	503	17	291	21	2668
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Appendix Table 3 Full Community Crosstab

			PIAL5d How difficult would it be, if at all, to give up the following things in your life? If you do not use or have the item, just tell me. How hard would it be for you to give up... - The Internet								
			Very hard	Somewhat hard	Not too hard	Not hard at all	(VOL.) Impossible	(VOL.) Do not use / Do not have	(VOL.) Don't know	(VOL.) Refused	Total
Community type - merge from Zip 2012	Rural	Count	172	89	75	73	5	0	0	0	414
		%	12.3%	16.9%	18.8%	23.6%	25.0%	0.0%	0.0%	0.0%	15.5%
	Suburban	Count	728	261	187	142	7	6	0	0	1331
		%	52.3%	49.4%	46.9%	46.0%	35.0%	42.9%	0.0%	0.0%	49.9%
	Urban	Count	493	178	137	94	8	8	5	2	925
		%	35.4%	33.7%	34.3%	30.4%	40.0%	57.1%	100.0%	100.0%	34.6%
Total		Count	1393	528	399	309	20	14	5	2	2670
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%