

**Lost in cyberspace: the web @ work**

**David N. Greenfield, Ph.D.**  
**The Center for Internet Studies &**  
**Psychological Health Associates, LLC**  
**Assistant Clinical Professor, The University of Connecticut,**  
**School of Medicine, Department of Psychiatry**

All inquiries should be addressed to:

Dr. David N. Greenfield  
The Center for Internet Studies  
345 North Main Street, Suite 302  
West Hartford, Connecticut 06117  
860-233-9772, ext. 14  
email:[drgreenfield@virtual-addiction.com](mailto:drgreenfield@virtual-addiction.com)

## Abstract

Recent research in Internet psychology and workplace behavior has identified the Internet as a psychologically potent communications/media technology. The Internet appears to be capable of altering the mood, motivation, concentration, and producing a dissociating and disinhibiting experience of users; for some individuals, patterns of use can transform to abuse, taking on a compulsive quality. Studies suggest that the Internet may have psychological properties that are capable of altering mood and behavior, often with little or no awareness. Many of the *daily spheres of behavior*, including work, appear to be effected by this powerful technology.

When it comes to distraction from work, the Net is so compelling that many employers are finding that putting Internet access on the desk of an employee is like putting a TV on their desk. Often the temptation to use the Net for non-work related activities is far too great, to point where on average; nearly 10% of a 40-hour workweek is spent on such non-work activities.

Research has shown that approximately thirty percent of the time spent on the Net is spent on non-work related activities at work; with even greater amounts of time on-line at work for more compulsive Internet users (Cooper, et al, 1999b; Greenfield, 1999a.) Most American businesses provide Internet access for their employees. Nearly seventy percent of companies surveyed had more than half of their employees online. Almost all companies have Internet access policies (IAP) in place (82.6 percent), outlining appropriate and inappropriate use of the Internet in the workplace. Despite IAPs, American businesses are facing a severe problem. More than sixty percent of companies have disciplined – and more than 30 percent have terminated – employees for inappropriate use of the Internet. Accessing pornography, online chatting, gaming, investing or shopping at work are the leading causes for disciplinary action or termination. Many companies are not concerned about the severity of the problem (49.6 percent), and/or have done very little to enforce their IAPs (59.4 percent use self or managerial oversight and only 37.5 percent use filtering software).

## Introduction

The Internet is at the cutting edge of an expanded usefulness on the job. Most employers see the potential uses of the Internet, and have begun to make the Net available to workstations and computers on the job. And after all why not? The Net is being hailed as the greatest technological advance since the telephone or television, exceeding both in the speed of growth and the acceptance of their use. You cannot go a day without hearing about the newest Internet technology or application. No business wants to be left behind on this technological rocket, in part because they see its potential, and in part because of potential efficiency gains.

Sometimes new technology can create new problems, especially in the workplace where, by some measures, unmonitored Internet access in the workplace may be too tempting for an employee to refrain from abusing, even in spite of employer monitoring and supervision.

Recent research in Internet psychology and workplace behavior has identified the Internet as a psychologically potent communications/media technology. The existence of psychological and behavioral impacts from Internet use and abuse seem unequivocal. Most practicing mental health clinicians have ample anecdotal experiences of the negative effects of the Internet on marriages, relationships, and work life behavior. Cooper, et al, 1999a; Cooper, Scherer, Boies, & Gordon, 1999b; Greenfield, 1999; Greenfield, 1999a); Young, 1996). Such studies suggest that the Internet may have psychological properties

that are capable of altering mood and behavior, often with little or no awareness. The daily behaviors of many people seem to be effected by this powerful technology and a large part of daily Internet use occurs during work hours.

As the lines between home and work continue to blend and blur, greater amounts of time are spent at work; as employers strive to retain employees and offers more comprehensive perks, the Internet continues to be one of the most utilized company resources. This use may move toward abuse simply because faster Internet access speeds, ease of access, better graphics, and lack of monitoring/accountability make abuse almost a given. Still it seems likely, that for some users their use may take on compulsive levels of abuse. This is consistent with numerous studies that seem to show approximately six to ten percent of Internet users becoming compulsive in their Net use (Greenfield, 1999; Cooper, et al, 1999b; Young, 1996). Recent studies and surveys have continued to highlight this growing trend, particularly in the sexual content areas of pornography, cybersex, and chat rooms.

- A study by the [Online Publishing Association](#) found that at-work Internet users spend more time per day on the Internet than watching TV (34% vs. 30%).
- In 2001, 60.7% of employees surveyed said they visit Web sites or surf for personal use at work (up from 50.7% in 2000) and The number one reason employees give for the Internet causing them to be being less productive at work is the time they spend surfing sites that are unrelated to work. ([UCLA study on Internet/E-Mail use](#)).
- Thirty-two percent of those who bought holiday gifts online in 2001 did at least some of their holiday shopping from work, up from 26% in 2000 and 28% of those who made gift purchases did so from their offices or cubicles; 32% of those who have Internet access at work used the Internet while on the job to buy holiday gifts, while only 24% of Internet users as a whole purchased gifts online. This suggests that people are taking advantage of fast connections at work ([Pew Internet & American Life Project](#)).
- According to a recent [Jupiter Media Metrix](#) report, the at-work usage of standalone media players in the US increased by 34.9% between January 2000 and January 2001, from 11.6 million to 15.7 million users.
- The No. 1 search term used at search engine sites is the word "sex," according to [Alexa Research](#). Users searched for "sex" more than other terms such as "games," "travel," "music," "jokes," "cars," "weather," "health" and "jobs" combined. The study also found that "pornography/porno" was the fourth-most searched for subject.
- Secret monitoring by the U.S. Treasury Department of Internet use among Internal Revenue Service employees found that activities such as personal e-mail, online chats,

- shopping and checking personal finances and stocks accounted for 51 percent of employees' time spent online. The top non-work Web activity favored by IRS employees was going to financial sites. Chat and email ran a close second, followed by miscellaneous activities (which included visiting adult sites), search requests, and looking at or downloading streaming media (reported in the [Chicago Tribune](#) and [Business 2.0](#)).
- IWon was the domain most visited by at-work surfers, with an average of about 16 visits per at-work surfer per month, according to Nielsen/NetRatings data for January 2001. Surfers at this sweepstakes/portal, on average, looked at 210 pages and spent more than an hour and 40 minutes at the site during the month (reported in [Business 2.0](#)).
  - Users of online auctioneer eBay Inc. at work spent 157 minutes at the site in January, 2001 compared with 126 minutes while at home. Long a favorite among at-work surfers, eBay ranked 7th among the most-visited sites for at-work surfers. However, eBay ranks first in terms of average pages per person and time spent per month, at almost 300 pages and two hours per person. Workers spend an average of 21 hours online at the office vs. an average of 9.5 hours at home ([Nielsen/Net Ratings](#) and [Business 2.0](#)).
  - Napster music swapping software was found on about 20% of over 15,000 work PCs examined. Internet streaming media is beginning to grow, and the market for servers capable of delivering video and audio will likely double between now and 2005, according to a study by the Cahners In-Stat group and employees earning \$75,000 to \$100,000 annually are twice as likely to download pornography at work as those earning less than \$35,000. ([eMarketer.com](#))
  - 70% of all Internet porn traffic occurs during the 9-to-5 workday ([SexTracker.com](#)).
  - 32.6% of workers have no specific objective when they surf the Internet ([eMarketer.com](#)).
  - One in five men and one in eight women admitted using their work computers as their primary lifeline to access sexual explicit material online (MSNBC).
  - 78% of Canadians with Internet access at work have used the Internet for personal reasons, and personal usage accounts for 26% of web surfing time at work (Source: [Angus Reid](#))
  - In a survey of Internet sites, the majority reported that traffic to their site is heaviest during work hours. 14% reported that traffic was highest from 7am to 10am, 24% stated it was highest from 10 am to 2pm, 24% from 2pm to 5 pm, 20% from 5pm to 8pm, and 18% from 8pm to 7am. At-work use of the Internet closely matches home use. Of those who use the Internet both at work and at home, 45% say they send personal e-mail more often at work than at home, 33% say they read the daily news more often at work than at home, 31% gather local information more often at work than at home, 31% investigate travel arrangements more often at work than at home, 24% visit sites related to hobbies more often at work than at home, and 24% participate in contests and sweepstakes more often at work than at home. Popular sites that are not always work-related attract many visitors during the work hours. Expedia.com gets 47% of its traffic during the workday,

- while Travelocity, MSNBC, iWon, and Weather.com reported receiving 46%, 42%, 42%, and 41% of their total visits during working hours ([Jupiter Communications](#)).
- U.S. Internet users at work spend over twice as much time online as home surfers even though they make up less than half the cyber population, according to new data. News sites reached 35.5 percent more users at work than at home and work users also spent 68 percent longer online. Finance sites reached over 30 percent more work users who spent nearly double the amount of time -- an average of 33 minutes per month -- online than home users. The work user will keep closer tabs on the markets throughout the day while they're open; 36% more users at work surfed news and information sites than at home, spending 68% more time on them. 31% more users at work surfed finance sites than at home, spending 102% more time on these sites Work users went online on average 41 times a day, compared to 18 times a day among home users Web users at the office take advantage of high-speed connections to access broadband entertainment sites such as Broadcast.com and MP3 more frequently than at home Shopping sites reached 18% more Internet users within the workplace than at home CNNfn had four times the reach in the workplace than its reach to home users Surfers access news, information and finance sites much more frequently during the workday than at night so that they can keep up with breaking news or the markets Online shopping is dominated by Amazon.com and eBay both at home and at the office. Only 5.7 million workers visit eBay, compared with 21.5 million for the most-visited site, Yahoo. But eBay visitors stay at the auction site the longest, almost three hours. Online shopping is dominated by Amazon.com and eBay both at home and at the office. Only 5.7 million workers visit eBay, compared with 21.5 million for the most-visited site, Yahoo. But eBay visitors stay at the auction site the longest, almost three hours ([Nielsen/Net Ratings](#)).
  - During work hours: 9% of employees earning under \$35K surf the Net for a new job, while 11% of workers earning \$75K to \$100K do the same ([Greenfield Online](#)).
  - Charles Schwab reveals that 72% of its customers plan to buy or sell mutual funds over the next six months, and 92% plan to do so online during work hours.
  - 82% of U.S. business executives surveyed by the consulting firm Dataquest (a division of the Gartner Group) believe Internet use should be monitored at their companies ([InformationWeek Online](#)).
  - 31.2% of employees feel it is appropriate to surf non-work-related sites up to 30 minutes a day, 14.8% said up to 1 hour is appropriate, and 9% said over an hour, while only 26.6% of employers feel it is appropriate for employees to surf non-work-related sites up to 30 minutes, 8.6% said up to 1 hour, and 4.2% said over an hour; 37.1% of employees said they surf the Web constantly at work, 31.9% said a few times a day, 21.3% said a few times a week, and only 9.7% said never; 28.83% said that their employer had caught them surfing non-work-related sites, although 54% of employers said that they have caught an employee surfing non-work-related sites at work; 24.3% of employees said they take precautionary measures to avoid detection; 56.5% of employees feel that surfing the Net or sending non-work-related e-mails decreases productivity, and 31% of employers said that they restrict employee Internet/e-mail usage ([Vault.com survey](#)).
  - The cost to businesses from Internet broadcasts of the October 1998 Starr report was in excess of \$450 million (ZDNet).

## The web @ work: lost in cyberspace

- More than half of all requests on search engines are "adult-oriented" (United Adult Sites).
- The top 3 word searches on the Internet: 1) sex; 2) mp3; 3) hotmail (Wordtracker.com).

In a study commissioned by Elron Software of Burlington, Massachusetts, which provides Internet access and e-mail content filtering software, they found a significant increase in the number of companies with Web and e-mail usage policies. The study also found that despite these policies, employees' personal use of corporate network resources is rising.

Elron's second annual corporate Internet usage study was conducted by NFO Interactive, a market research firm that interviewed 576 employees who have Web and e-mail access at work. For the companies represented in the study, 68% have Web usage policies, up from 48.9% a year ago. Less than 60% have corporate e-mail policies, an increase from 46.5% a year ago. According to the study, employees are getting more personal e-mails with attachments, with 73.5% of respondents saying they receive these types of e-mails compared to 63.6% last year. In addition, nearly one out of five respondents received at least one potentially offensive e-mail per month from a co-worker. In the area of inappropriate surfing, one in three corporate workers said they spend 25 minutes or more each day using the Internet for personal reasons. Much of that time is spent shopping, with the most popular destination sites for vacations and vehicles. Employees report worse behavior among their colleagues. Nearly one in 10 respondents say they have seen co-workers accessing adult sites, while nearly one-third say they have seen co-workers job hunting on the Internet.

Lewis Maltby, president of the National Workrights Institute says, "You are being watched at work whether you know it or not"; sixty-three percent of large and mid-sized companies monitor Internet use and 46.5% store and review e-mails, according to an annual study by the American Management Association. Writing e-mails and roaming the Web feels private. Many workers would rather research a health issue online than call a doctor, or will flirt with a co-worker via e-mail but not in front of the boss. This sense of anonymity is actually an illusion as much of what occurs online is traceable and recordable through corporate network systems. "You need to work on the assumption that your employer is reading

The web @ work: lost in cyberspace

over your electronic shoulder," says Nancy Flynn, author of *The ePolicy Handbook* and executive director of the ePolicy Institute. "If you work in an office, you should assume you are being monitored."

There are many possible reasons for the Internet's powerful effect on human behavior. It seems that the Internet may combine certain key psychological elements, which may stimulate an almost addictive response. This response is present, to some degree, in all users, but some may become overwhelmed by it. The Internet has certain elements in common with gambling, and it is that irresistible and uncertain potential for reward, e.g. finding information, winning at gambling, sexual gratification, shopping, etc., that produce a strong attraction to online use.

Internet use in the workplace is indeed a complex issue. There is little doubt that as the *spearhead of the digital industrial revolution*, the Internet has become indispensable in conducting day to day business of all types. More and more employers are utilizing the Net as place to conduct business, as well as a tool to conduct business with. When it comes to distraction from work, the Net is so compelling that many employers are finding that putting Internet access on the desk of an employee is like putting a TV on each workers desk. Often the temptation to use the Net for non-work related activities is far too great, to point where on average; nearly 10% of a 40-hour workweek is spent on such non-work activities.

## **Methods**

### **Procedures**

#### **Part I:**

This collaborative study was undertaken 2000 by Websense, Inc. an Internet access management software company and The Center for Internet Studies and administered by the Saratoga Institute (SI) to conduct a survey on employee misuse of the Internet at work. The Saratoga Institute is a human resources consulting company. The survey was co-designed and interpreted by Dr. David Greenfield from the (CFIS) and funded solely by Websense, Inc. Human resource directors at more than 1,500 companies were

The web @ work: lost in cyberspace

contacted by telephone, all of which were existing SI clients, ranging from mid-sized to 150,000 employees. Of the companies contacted, SI received 224 (fifteen percent) completed surveys for analysis.

## **Part II:**

The second study involved the direct interview of 300 randomly selected employees regarding their Internet use patterns at work. Surveys were again completed via telephone by trained interviewers. The survey was funded by Websense, Inc.

## **Results**

### **Part I: From the human resource manager's survey, the following trends emerged:**

- Most American businesses provide Internet access for their employees. Nearly seventy percent of companies surveyed had more than half of their employees online.
- Almost all companies have Internet access policies (IAP) in place (82.6 percent), outlining appropriate and inappropriate use of the Internet in the workplace.
- Despite IAPs, American businesses are facing a severe problem. More than sixty percent of companies have disciplined – and more than 30 percent have terminated – employees for inappropriate use of the Internet.
- Accessing pornography, online chatting, gaming, investing or shopping at work are the leading causes for disciplinary action or termination.
- Many companies are not concerned about the severity of the problem (49.6 percent), and/or have done very little to enforce their IAPs (59.4 percent use self or managerial oversight; only 37.5 percent use filtering software).

**1. What percentage of employees at your company has access to the Internet?**

	#	%
Over 90%	79	35.3
75-90%	26	11.6
50-75%	51	22.8
25-50%	38	17.0
10-25%	18	8.0
Under 10%	11	4.9
*Blank	1	0.4

\* Not all questions were answered by every participant

**2. YES or NO, does your organization currently have a written policy for employees outlining appropriate and inappropriate uses of the Internet?**

	#	%
YES	185	82.6
NO	39	17.4
Blank	0	0.0

**3. On a scale of 1 to 5 – with 1 being “not concerned at all” and 5 being “extremely concerned,” how concerned is your company about employees surfing the Internet inappropriately?**

	#	%
not concerned	1	15.2
	2	34.4
	3	29.9
	4	15.2
extremely concerned	5	4.5
	Blank	0.9

**4. YES or NO, to your knowledge, have employees in your organization been reprimanded or disciplined for inappropriate use of the Internet?**

	#	%
YES	144	64.3
NO	78	34.8
Blank	2	0.9

**5. How many have been disciplined?**

	#	%
<5	60	26.8
5-10	31	13.8
>10	18	8.0
*Blank	115	51.3

\*25 of the 144 “yes” in question #4 did not respond

**6. Responding YES or NO to each, which of the following inappropriate uses resulted in reprimands or discipline over the past year?**

		#	%
Shop/auction?	YES	15	6.7
	NO	115	51.3
	Blank	94	42.0
Investing?	YES	16	7.1
	NO	114	50.9
	Blank	94	42.0
Chat/personals?	YES	28	12.5
	NO	102	45.5
	Blank	94	42.0
Pornography?	YES	92	41.1
	NO	38	17.0
	Blank	94	42.0
Games?	YES	26	11.6
	NO	104	46.4
	Blank	94	42.0
Gambling?	YES	6	2.7
	NO	124	55.4
	Blank	94	42.0
Sports?	YES	18	8.0
	NO	112	50.0
	Blank	94	42.0
Hate groups?	YES	2	0.9
	NO	128	57.1
	Blank	94	42.0

**7. YES or NO, to your knowledge, have employees in your organization been terminated for inappropriate use of the Internet?**

	#	%
YES	68	30.4
NO	76	33.9
Blank	80	35.7

**8. How many have been terminated?**

	#	%
<5	43	19.2
5-10	4	1.8
>10	6	2.7
*Blank	171	76.3

\* 15 of the 68 "yes" in question #7 did not respond

**9. Responding YES or NO to each, which of the following inappropriate uses resulted in termination over the past year?**

		#	%
Shop/auction?	YES	4	1.8
	NO	54	24.1
	Blank	166	74.1
Investing?	YES	1	0.4
	NO	54	24.1
	Blank	166	74.1
Chat/personals?	YES	4	1.8
	NO	54	24.1
	Blank	166	74.1
Pornography?	YES	47	21.0
	NO	11	4.9
	Blank	166	74.1
Games?	YES	5	2.2
	NO	53	23.7
	Blank	166	74.1
Gambling?	YES	4	1.8
	NO	54	24.1
	Blank	166	74.1
Sports?	YES	3	1.3
	NO	55	24.6
	Blank	166	74.1
Hate groups?	YES	0	0.0
	NO	58	25.9
	Blank	166	74.1

**10. To what extent does your organization make an effort to monitor employee use of the Internet? Choose from “no effort” to “considerable effort.”**

	#	%
no effort	42	18.8
some effort	139	62.1
considerable	38	17.0
Blank	5	2.2

**11. If you responded with “some” or “considerable” effort in Question #10, what methods are used to monitor employee use of the Internet?**

		#	%
Filtering software?	YES	84	37.5
	NO	77	34.4
	Blank	63	28.1
Self-oversight?	YES	50	22.3
	NO	102	45.5
	Blank	72	32.1
Managerial oversight?	YES	83	37.1
	NO	69	30.8
	Blank	72	32.1

**12. YES or NO, has your company been involved in any litigation over inappropriate use of the Internet by employees in the past year?**

	#	%
YES	6	2.7
NO	216	96.4
Blank	2	0.9

**Part II: Results of 300 randomly selected employee interviews.**

This second study examined Internet use patterns among 300 randomly selected individuals who had Internet access at work. It is not surprising that almost half (forty seven percent) admitted to surfing non-work related for an average of 3.24 hours per week. Forty-three percent of employees surf two or more hours per week, with nineteen percent surfing four or more hours per week on non-work related sites.

These findings seem to parallel what we have found in other related surveys and studies, where the Internet is being used for personal activity by large numbers of employees a trend that appears to be growing. Managerial oversight by physically watching employees seems negative to employees, as they experience this as more intrusive than monitoring software. Employees seem to favor education for themselves and their managers on Internet abuse problems (fifty four percent) and possible reprimand (informal=fifty seven percent; formal/written=fifty eight percent). It was also found that only (thirty eight percent) of employees understand the drain on a company’s Internet resources from excessive Net use.

## Discussion

How business is dealing with Internet use and abuse depends largely on whether the employer considers non-work related Net use to constitute an abuse of company policy or resources. And many if not most employers (eighty three percent), report having written policies on Internet use in the workplace, even if when do not monitor, filter or block access. What seems even more relevant is that nearly half of the surveyed employees believe that surfing the Net *decreases* their productivity. Similar figures were found in our subsequent follow-up studies as well. Part II of this study found that surprisingly low numbers (less than fifty percent) of managers are concerned about the level of employee use/abuse in spite of the number of wasted work hours spent online.

There is little doubt as to the acceptance and usefulness of the Internet in the workplace. Approximately twenty nine percent of the time spent on the Net is spent on-line at work (Greenfield, 1999a) is spent in non-work related sites and this figure seems to be slightly higher (thirty three percent) for more compulsive users. There is also little doubt of the potential problems and pitfalls that this new technology can create at work. Productivity, legal liability, and bandwidth drain are but a few of the many challenges we face in effectively using essential digital technology such as the Internet in today's corporate and business environment.

Technology has undoubtedly improved the quality and productivity of our lives at work. The Internet has further opened up new avenues for increased productivity, greater flexibility, and new applications for the work we do. We now have the ability to instantly and efficiently access a virtually unlimited fountain of information in the corporate environment. Not only do most businesses have instant access to any information they may want or need, but they can also use the Internet to integrate all their office locations, or make more information more readily available locally. This has opened up many new horizons for most businesses, and in doing so is creating a global integration of the world's information economy. The Internet is not only a way of *conducting* business, but a way of *creating* new business as well.

These facts don't include the potential for legal issues relating to employees who feel harassed from being exposed to inappropriate, provocative, or sexual email or those who download pornography onto the company server. There appears to be at least some cause for concern for employers and employees alike. Could these situations constitute a situation where an employer isn't providing a reasonable and professional work environment? We also have the potential threat of an employee suing his or her employer under the ADA statutes for termination relating to an Internet abuse situation, claiming they suffer from a compulsive Internet use disorder? These facts are not lost on entrepreneurs who have created software that allows you to toggle back and forth between what you are surfing for and a *fake desktop screen*. This method would allow an employee to *look busy* when in fact they are in fact *not working!* Although most business probably expect some degree of personal use of the Internet while at work (just as they do for the telephone and copier) they are probably not prepared for the *two-three hours* or so a day that heavy Internet users are spending online while at work. The financial ramifications of this cyber-slacking may be seen in the form of reduced productivity and decreased efficiency, but there may be other costs as well.

With all this growth and promise what could be the problem? There is ample evidence that many employees are abusing the Internet while on the job. For compulsive Internet users who have access at work, this research suggests that upwards of three hours a day may be spent online at work. The problem is not new, but it seems to be growing as more companies add broadband Internet access to their networks, and as Internet access becomes indispensable in the workplace. The problem may not as yet be so serious that the business community feels they need to deal with it, although a large percentage of our surveyed companies (as well as in other studies) have Internet use policies on the books. After all, Internet use and abuse are somewhat secretive and illusive. In addition, there is a strong positive valance that surrounds computer technology and the Internet; with all its uses and applications, it is viewed as businesses' best friend. There appears to be enough evidence as to the compulsive nature of the Internet, and especially specific types of Internet content, e.g. stock trading, on-line casino gambling, pornography, chat rooms/personals, travel, sports, shopping, and e-mail. The synergistic combination of the Internet and such stimulating content holds as true at work as it does in the the home.

It will likely require a paradigm shift to begin to see the Internet as potential problem to be addressed proactively, alongside other work-related issues such as substance abuse, sexual harassment, violence in the workplace, among others. Although no one really knows what employees are doing online (although some employers are beginning to monitor Web access), there is little doubt that employees are using the Internet for personal purposes while on the job. The extent of the abuse, and how to address the challenges that this great technology poses, still remains to be seen. Whether employers view the use or abuse as a problem or a perk may depend on how much actual productivity is thwarted by this digital distraction, and whether some degree of use/abuse is to be tolerated or ignored as are personal phone calls and copies.

Note: The author would like to gratefully acknowledge the invaluable collaboration and data analysis of Grace Capilitan of Websense, Inc.

### References

- Cooper A., Putnam, D. E., Planchon, L. A , & Boies, S. C. (1999a). Online sexual compulsivity: Getting tangled in the net. *Sexual Addiction & Compulsivity: The Journal of Treatment and Prevention*, 6: 79-104.
- Cooper, A., Boies, S., Maheu, M., & Greenfield, D. (2000) Sexuality and the Internet: The next sexual revolution. In Muscarella, F. and Szuchman, L. (Eds.), Psychological Perspectives on Human Sexuality: A Research Based Approach (pp. 519-545). John Wiley and Sons, Inc.: New York.
- Cooper A, Scherer CR, Boies SC, & Gordon BL. (1999b). Sexuality on the Internet: From sexual exploration to pathological expression. *Professional Psychology*, 30(2), 154-164.
- Greenfield (1999a) Psychological characteristics of compulsive Internet use: a preliminary analysis. *CyberPsychology and behavior*, 2, 5, 403-412.
- Greenfield, D. N. (1999). *Virtual addiction: Help for netheads, cyberfreaks, and those who love them*. Oakland, CA: New Harbinger Publications.

The web @ work: lost in cyberspace

Young, K. S. (1996, August). *Internet addiction: The emergence of a new clinical disorder*. Paper presented at the 104th Annual Convention of the American Psychological Association, Toronto, Ontario, Canada.