

Use Of Internet Among Adolescents In Relation To Gender Biasness And Technostress.

Sukhmani Dhaliwal

PGT, Shemrock Sr. Sec School Mohali

(UGC AND JRF Qualified)

House number 994, Phase 3B2

Mohali (Punjab)

Pin number:-160060

Email id :- sukhmani_dhaliwal@yahoo.com

Abstract

The widespread use of modern information and communication technology (ICT) in work life and private life follows in the wake of rapid advances in technology and popularization of different devices and applications, implying fast changes in exposure profiles in the population over the past few decades. Although the Internet frequently has been characterized as male-dominated, recent evidence indicates that the gender gap in Internet use is rapidly diminishing. If more females are using the Internet, then what specific applications do they prefer and do they differ from those of males? This article presents results from a survey assessing gender differences in specific uses of the Internet. The issue of possible negative effects of exposure to ICT has been raised by various groups. Musculoskeletal symptoms and ergonomics in relation to computer use and different input devices have been examined, but also, mental health effects have been considered. The term techno-stress emerged more than two decades ago, to describe stress reactions in relation to computer use. It was suggested that computer use can lead to psycho physiological stress reactions due to occupational strain, and that these reactions can become conditioned to the computer work environment, leading to symptoms associated with computer use.

Keywords: Internet, Adolescents, Gender Biasness and Techno Stress.

Introduction

Science and Technology have brought about a tremendous change in the social and economic condition of the world. Technology is generally thought of as the use of discoveries of science. It is being used in every sphere of life. Technology has yielded many new machines, material and media which have created great potentiality and have brought revolution in the field of education.

Internet is advancing so fastly that it is affecting the life of everyone. Rightly we can say we are living in the age of computers. The internet

has made increasing and powerful impact upon almost every working place like home, school, college, office, industry, business, science education, hospital, railway, research design organization and society and so on.

Internet also resembles a library because it has tools that aid the search for information as in a traditional library for example one finds a card catalog and has similar services that helps one find information electronically.

The introduction of internet has made tremendous impact on the academic activities of the faculty researchers and the students. With

the advent of internet a significant transition can be seen in their approach and the way they seek information and the methods they employ for research and learning activities. This has become possible as internet provides a wealth of new course materials and acts as a powerful supplement to the transitional ways of studying and learning. Internet is now facilitating electronic communication and exchange of ideas and collaboration in research globally; internet can be accessed for the latest development in one's area of research at an amazing speed.

It also plays a significant role in distance education and conferencing and thus transforming the academicians as facilitators providing guidance, drawing students and steering observations. The net therefore creates an excellent academic environment where the academic community can perform their activities in a rejuvenated manner.

Almost all occupations and academic disciplines have been profoundly affected by the internet speed for their work.

MEANING OF INTERNET

Internet is the abbreviation of network. Internet is a global network of networks. A network is defined as a data communication systems that interconnects computer systems at various sites. A network may be composed of different combinations of LAN's (Local Networks), MAN's (Metropolitan Area Networks), or WAN's (Wide Area Networks). At

the simplest a network consists of two computers, or more devices with a length of wire between them, facilitating communications.

The internet is decentralized by design that is it is not centrally controlled. Each internet computer is called host and each host is independent. Internet can be accessed through variety of ways. Many online services are available that provide free access to internet services. Internet services access can be gained through commercial Internet Service Provider (ISP). The most important part of internet is WWW which is also known as World Wide Web or web and most important feature is hypertext which allows cross-referencing. This web enables to use billions of web pages through an interface called as browsers.

Kumari (2013) says that Internet is a great tool and readymade forum for communication. With the growing popularity of Internet communication applications such as instant messaging, blogs and social networking sites among adolescents, the Internet has become an important social context for their development.

GENDER BIASNESS IN RELATION TO INTERNET USAGE

American Heritage Dictionary (1983) Gender is defined by the as "classification of sex." According to this same source, bias is defined as "preference or inclination that inhibits impartiality; prejudice". Thus gender bias is separation of gender in a way which prefers one sex over the other. Gender bias in technology

refers to preference for or favouring of one sex over the other in computer use and/or access, software use and/or manufacturing, and Internet use and content.

Gaicquinta (1990) said it can be seen that women look at computers as instruments to complete a task. To the contrary, boys usually view computers as recreational. They see them as toys to be played with and explored. Thus boys explore, challenge the limits, and often shape computers and computer use. Computers are viewed differently by males and females.

Ellis (2014) says that Gender bias is a preference or prejudice toward one gender over the other. Bias can be conscious or unconscious, and may manifest in many ways, both subtle and obvious. In many countries, eliminating such preferences is the basis of many laws, including those that govern workplaces, family courts, and even the voting booth. Despite these efforts, many legal and political scholars argue that total gender parity remains a far off goal, one which many regions are not remotely close to reaching.

TECHNO STRESS

The term techno stress was coined in 1984 by a clinical psychologist, Dr. Craig Brod who conceptualized it as:

"A modern disease of adaptation caused by an inability to cope with the new computer technologies in a healthy manner. It manifests itself in two distinct hint related ways in the struggle to accept computer technology and in

the more specialized form of over identification with computer technology" (Brod, 1984)

Brod (1984) expresses the most important symptom of techno stress as being anxiety towards computer technologies. In other words, anxiety is given as the result of techno stress. Brod also lists physical symptoms such as muscle cramps, headaches, joint aches, and lack of sleep/insomnia.

Champion (1988) emphasizes that techno stress is a serious illness, and lists several of its symptoms: panic, anxiety, resistance, technophobia, mental fatigue, physical ailments, intolerance and perfectionism. Additionally, drops in work efficiency and limited utilization of technology are mentioned as preliminary symptoms.

Tarafdar, Tu, Ragu-Nathan and Ragu-Nathan (2007) identified five components of techno stress, which are also known as techno stress creators. The are as follows:

- ✓ **Techno- Overload:** One well documented form of techno stress is the escalating problem of information overload. Just as fat has replaced starvation as most nations' number one dietary concern, information overload has replaced information scarcity as important new emotional, social, political problems. Until recently, the production, distribution and processing of information remained evenly balanced. People could receive and think same pace as it was generated. Since the mid-20th-century computers, television, mobile phones, satellite and the internet have created a century, of hyper-Production and

hyper-distribution that has surpassed human condition processing abilities (Shenk, 1998). The impact of information Overload is particularly apparent in the workplace as more and more people spend their time at work sorting through e-mails and web-pages while their day is interrupted by ringing phones, and responding to e-mails. Without a doubt, technology has made access to information easier than ever before. Access to all this information is one thing, processing it is quite another.

- ✓ **Techno-Invasion:** While technology such as e-mail, cell phones, texts, tweets and status updates has made it easier to stay in touch, these communications are often invasive, intrusive and impinge on our ability to concentrate and work uninterrupted. All the 4 task-switching, additional pieces of information that we are forced to process and extra decisions we have to make only add to the stress we may already be experiencing.
- ✓ **Techno-Complexity:** All change is stressful to some degree even positive changes like getting married or starting a new job, because of the need to learn new skills and updated our mental map of the world. When one considers the rate at which technological change is occurring and the requirements of learning new operating systems, new software programs new ways of processing data, new hardware, etc, it is easy to see why rapid changes in technology can be stress-inducing.

- ✓ **Techno-Insecurity:** This can be of dual perspectives. Insecurity can be as a result workers feeling threatened that they will lose their jobs, either being replaced by the new ICT or by other people who are better in ICT compared to them. The other dimension the vulnerability and security threat experienced due to massive personal information available on the internet.
- ✓ **Techno-Uncertainty:** This is a situation where ICT users feel uncertain and unsettled since ICT is continuously changing and need upgrading. Other terms that were synonymous with techno stress identified by researchers include technophobia, computer phobia, computer anxiety, and computer stress. In addition, the term digital depression has also been used to identify the feeling of an employee when being overwhelmed by technology (Singh, 2008).

1.13 CORE FACTORS OF TECHNO STRESS

Possible factors influencing techno stress are listed as experience in use of technology, age, pressure of supervision during use, and general climate of the working environment (Brod 1982).

Champion (1988) provides main factors inducing techno stress:

- 1. Environmental factors:** Inappropriate working conditions or other environmental conditions, inappropriate lighting, insufficient equipment with security measures, equipment with compatibility issues, noisy equipment, incapable equipment,

software limitations, lack of funding, electrical issues, risk of accidental data loss. insufficient maintenance knowledge, insufficient senior/adult personnel may cause people to suffer stress related with the use of technology.

2 Social factors: Conflicts of interest caused by the use: of technology, power struggles, and work and role changes, anxiety over loss of employment: work/employment fragmentation and hierarchal changes may cause people to suffer- technology related stress. For example, an administrator who is decisive regarding the use of technology may press employees on their use of technology.

COMBATING TECHNO STRESS

Combating techno stress means finding ways to achieve a healthy balance of using technology without becoming consumed by it:

- **Awareness is the first step.** See where technology has created stress in your personal and professional life. Keep a daily log or diary to identify how and when you use the Internet, cell phones, and pagers. By becoming more aware of ways you use and possibly abuse technology, you'll learn to take control of it instead of being controlled by it.

- **Take a technology time-out.** Take time each day to avoid plugging into anything. Avoid computers, fax machines, phones, and any other technological devices that habitually demand your attention. Get up, walk around the office, stretch, do breathing exercises, or meditate. At the very least, take a short vision break from your

computer. A quick time-out can help you feel more refreshed and better able to tackle the next technological task.

- **Limit your need to multitask.** Not everything needs to be done all at once. While you may feel as if you are getting more accomplished, multitasking actually hurts your concentration. Learn to focus your attention on one task at a time. Instead of answering your e-mail while talking on the phone with a client, only check your e-mail or only check your voice mail. You'll find that by learning how to prioritize and setting goals for when and how you use technology, you'll be less distracted and better able to concentrate.

- **Slow down.** So often we get caught up in having to finish the next report, having to answer the next e-mail, or having to make the next phone call. We rush through the day never pausing long enough to really slow down. Give yourself more time to complete tasks. If a project is expected to take two days, plan on a third, just so you don't feel so rushed; if you planned on 15 minutes to get to your next appointment, allow yourself a half-hour. Slowing down helps you feel more relaxed and better able to combat the wired whirlwind of techno stress.

- **Exercise.** Sitting in front of your computer all day means that you aren't getting the proper exercise. Get up from your desk, take a walk at lunch, or stretch your legs and take a stroll around the office. If you can, join a gym or take a Pilates class. Taking even small steps to exercise momentarily gets you away from work, lets you

clear your mind, and helps you regain concentration when you do have to answer that next e-mail.

- **Rekindle old interests.** Take time to enjoy the non-technical things in your life. Have interests or hobbies fallen by the wayside? Do you find yourself completely absorbed with work? Rekindle those old interests or take up new ones. Spending time on other interests will give you a different perspective on your time pressures at work and help you feel better refreshed when you return to the office.

- **Take e-vacations.** When you decide to take a vacation, make sure it is a real vacation. Don't tote your laptop on the trip or expect to keep in touch with the office. Go out to dinner or to the movies with family and friends and don't take along your cell phone or pager. Learning to feel completely relaxed without access to technology may be a little daunting at first, but in the long run it will prove worth it. You will learn to work smarter, not harder.

VARIOUS STUDIES REVEALING USE OF INTERNET AMONG ADOLSCENTS IN RELATION TO GENDER BIASNESS

Teo and Lim (2000) conducted study to examine gender differences in internet usage in Singapore, a small island of 650 square kilometres in south-east Asia. Data were collected on internet users via a questionnaire survey placed on the World Wide Web. 1370 usable responses were received, of which 89% were males and 11% were females. Gender differences in terms of the demographic

profile of internet users, usage patterns, task preferences and factors affecting an enjoyable Internet experience were examined.

Teo (2001) obtained a total of 1,370 usable responses using a Web page survey. Results showed that males are more likely to engage in downloading and purchasing activities while females are more likely to engage in messaging activities. Younger users engage in messaging and downloading activities to a greater extent than older users. Perceived usefulness is associated with the four activities, while perceived ease of use and perceived enjoyment are associated with messaging, browsing and downloading activities.

Weiser (2004) presented results from a survey assessing gender differences in specific uses of the Internet. The survey included 19 items and was made available to Internet users. Results showed that males use the Internet mainly for purposes related to entertainment and leisure, whereas women use it primarily for interpersonal communication and educational assistance. However, additional analyses showed that several gender differences were mediated by differences in age and Internet experience.

Banerjee, Kang, Sen and Rao (2005) investigated whether gender difference in computer usage is carried over to Internet usage. They examined if there are fewer females using the Internet than males and explored how gender difference plays a role in using the Internet for information search, interpersonal communication, entertainment, education, shopping, and personal finance. In addition, they investigated the male-female difference in Internet use by race, age, and

educational level. Data used in this study are based on the September 2001 U.S. Census Bureau's Current Population Survey, a survey of approximately 50,000 households and more than 157,000 individuals across the United States. The analysis of data showed reverse trends regarding gender in the use of the Internet; furthermore, more females show Internet usage than males for e-mail or instant messaging, for taking an online course, for searching information about products and services, for purchasing products or services, for searching for health services or practices, for getting information about government, and for searching for jobs. However, more males use the Internet than females to play games; for chat rooms or listserv; to get news, weather, or sports; for viewing television, movies, or radio; for telephone calls; to trade stocks, bonds, and mutual funds; and for online banking.

Mishra, Yadav and Bisht (2005) conducted a study to know Internet utilization pattern of the undergraduate students of G B Pant University of Agriculture and Technology, Pantnagar. The findings of the study indicated that a majority of the students (85.7%) used the Internet. Out of the Internet users 67.7% were male students and 32.3% female students. The findings of the study also showed that 61.5% of the males and 51.6% of the females used Internet for preparing assignments. A majority of the respondents i.e. 83.1% male and 61.3% female respondents indicated that they faced the problem of slow functioning of Internet connection.

Sarkadi and Bremberg (2005) reviewed a total of 2221 users completed the anonymous survey

posted on the website during a one-week period in Sweden. Most respondents (95%) were female (mean age 30.6 years). Perceived social support, measured by the Interpersonal Support Evaluation List (ISEL) appraisal subscale, indicated high perceived support. Internet use for general parenting issues in Sweden, mainly by women, does not seem to follow the digital divide phenomenon. Therefore, the internet provides an exciting opportunity for future infant and child public health work. The lack of fathers, however, was a surprising finding and introduces a gender bias into this seemingly socially unbiased medium.

Bouhnik and Mo (2014) used a questionnaire on internet usage in relation to gender biasness to administer 1,048 students in the 7th to 11th grades in six different schools, one class in each grade. The questionnaire included personal data, characteristics of Internet interaction patterns, moral dilemmas in daily life, and moral dilemmas in the virtual environment. They found that boys prefer, more than girls, to surf at school and in Internet cafés. Girls tend to use the Internet more for doing homework and blogs than boys, whereas boys tend to play Internet games more than girls. Gender differences were found regarding immoral behaviour. Boys were involved more frequently than girls in behaviours such as cyber bullying, plagiarism, impersonation, and downloading music and movies illegally from the Internet.

TECHNO STRESS

Tu, Wang and Shu (2005) defined Techno stress as any negative effect on human attitudes, thoughts,

behaviour, and psychology that directly or indirectly results from technology. With the recent widespread application of IT and the Internet throughout China, techno stress has become a serious issue for both users and IT professionals due to its potential effect on users mental health and on-the-job productivity. Chinese employees are surrounded, often overwhelmed, by modern technology. The top 100 largest Chinese enterprises, accounting for 25% of China's GDP, are investing heavily (\$10--\$15 billion annually) in new IT applications, including enterprise resource planning systems. A 2002 report by the Chinese Ministry of Information Industry stated that there are 380 million mobile phone subscribers in China, making the country the world's largest mobile phone market. And a survey conducted in 2004 by the China Internet Network Information Centre found that 87 million Chinese frequently accessed the Internet in 2004, an increase of 19 million, or 27.9%, over 2003.

Thomee, Eklof, Gustafson, Nilsson and Hagberg (2007) conducted study to investigate whether high quantity of information and communication technology (ICT) use is a risk factor for developing psychological symptoms among young ICT users. He surveyed 1127 people through questionnaire. For women, high combined use of computer, mobile phone, short message service (SMS) messages and online chatting was associated with increased risk of reporting prolonged stress and symptoms of depression, while Internet surfing increased the risk of developing sleep disturbances. For men, number of mobile phone calls and SMS messages per day

were associated with sleep disturbances. SMS use was also associated with symptoms of depression.

Joiner, Brosnan, Duffield, Gavin and Maras (2007) conducted survey on 446 students (319 females and 127 males) from two universities in the UK and one university in Australia to check techno stress among students. Majority of participants reported positive for techno stress. There was a significant relationship between Techno stress and Internet use.

Çoklar and Kele (2011) conducted research on 287 participants and used data gathered through an online questionnaire. The study concluded that social networking users have "medium techno stress level", and that the significant contributing factors in techno stress were social pressure regarding the use of technology, remembering large quantities of passwords and user names, anxiety regarding data loss, and technology giving shape to professional life. In addition, it was determined that techno stress levels vary based on gender, profession and age.

Goddard and Michelle (2011) conducted a study to investigate techno stress, the ways that sleep quality and misuse of technology might be associated with depression among college students. A total of 236 college undergraduates from a large, urban university were surveyed. Independent samples t tests revealed no mean group differences between men and women for depression, sleep quality, techno stress, or misuse of technology. A multiple hierarchical regression

indicated that younger age and poor sleep quality were linked to higher amounts of depression among college students. Additional regression analyses revealed that techno stress predicted an additional 1.1% of the variance in depression after controlling for sleep quality, and misuse of technology predicted an additional 4.9% of the variance in depression after controlling for sleep quality. A series of regression analyses to test for mediation were conducted to determine if techno stress or technology misuse mediated the relationship between sleep quality and depression.

Tarafdar, Tu and Nathan (2011) concluded the results, based on survey data analysis from 233 ICT users from two organizations, show that factors that create techno stress reduce the satisfaction of individuals with the ICT. The paper contributes to emerging literature on negative outcomes of ICT use by (1) highlighting the influence of techno stress on users' satisfaction and performance, (2) extending the literature on techno stress and (3) demonstrating the importance of user involvement and innovation support mechanisms in reducing techno stress-creating conditions and their ICT use-related outcomes.

Jena and Mahanti (2014) analyzed the factors affecting the techno stress among Indian academicians. This research is conducted on 116 academicians in India using an online questionnaire. The study concluded that techno

stress has significant effect on gender, age, technology awareness and tenure of academicians. Pandey (2014) conducted a study on the effect of excessive internet usage on the level of adolescents techno-stress. In order to investigate, the researcher has selected 120 adolescents of 11th grade as a sample through Multi Stage Random Sampling and conducted an experiment using Pretest-Posttest Equivalent Groups Design. The main findings of the study were: (a) excessive internet usage negatively affects the level of adolescents' techno-stress; (b) it affects more negatively rural and female adolescents in comparison to their urban and male counterparts; (c) most to the adolescents pertaining to low (SES) and least to the adolescents of high (SES) in comparison to other (SES) counterparts; (d) internet usage, area, sex and socio-economic status (SES) differences are interacting significantly for the techno-stress of adolescents.

CONCLUSION

This article presents results from a survey assessing gender differences in specific uses of the Internet. Numerous gender differences in preferences for specific Internet applications emerged. Results showed that males use the Internet mainly for purposes related to entertainment and leisure, whereas women use it primarily for interpersonal communication and educational assistance. Various studies revealed that males make more use of internet in comparison to females and more the usage and more will be techno stress.

REFERENCES

- Asemi, A. (2005). Information searching habits of internet users : A case study on the Medical Sciences University of Isfahan, Iran. *Webology*, 2 (1). Retrieved on 7th March 2015 from <http://www.webology.org/2005/v2n4/a21.html>
- Bouhnik, D. & Mor, D.(2014). Gender differences in the moral judgment and behaviour of Israeli adolescents in the internet environment. *Journal of the Association for Information Science and Technology*, 65(3), 551-559. Retrieved on 10th November 2014 at 7.40 pm from <http://onlinelibrary.wiley.com/doi/10.1002/asi.22979/abstract>.
- Brod,C.(1984). Managing Technostress: Optimizing the Use of Computer Technology. *Personnel Journal*,61(10),753-757. Retrieved on 11th November 2014 from <http://eric.ed.gov/?id=EJ269412>.
- Çoklar, A.N. & Şahin, Y.L. (2011). Technostress levels of social network users based on ICTs in Turkey. *European Journal of Social Sciences*, 23 (2), 171. Retrieved on 10th November at 8.40 pm from <http://www.tecnostress.it/wp-content/uploads/2011/09/Technostress-in-Social-Turkey.pdf>
- Durkee,T. & Kaess,M. (2012) Prevalence of pathological internet use among adolescents in Europe: demographic and social factors. *Journal on Addiction*,107(12),2210-2222. Retrieved on 9th May 2015 from <http://onlinelibrary.wiley.com/doi/10.1111/j.1360-0443.2012.03946.x/abstract;jsessionid=63726EBC8E0F2584F29A54D790D0BAE8.f04t04?deniedAccessCustomisedMessage=&userIsAuthenticated=false>.
- Ellis,J.(2014).What is gender biasness?.*Journal on Gender Biasness*,34 (2),65-85.Retrieved on 10th November 2014 from <http://www.wisegeek.org/what-is-gender-bias.htm>
- Gaicquinta,B. (1993). Beyond technology's promise: An examination of children's educational computing at home. *Cambridge University Press:Great Britain*. Retrieved on 19th November 2014 from <http://education.illinois.edu/wp/original/access/gender.html>
- Halasz,I.M.(1997). Cyber Ed? Corrections Today, Educational uses of Internet in the world and Turkey. *Online Journal of Distance Education*, 4(3),52-97. Retrieved on 19th November 2014 from <http://tojde.anadoluo.edu.tr/trjdel1/articles/usun.htm>.
- Jena,R.K., & Mahanti,P.K.(2014). An Empirical study of Techno stress among Indian Academicians. *International Journal of Education and Learning*,3(2),1-10. Retrieved from 7th March 2015 from http://www.sersc.org/journals/IJEL/vol3_no2/1.pdf
- Kaur, A. (2000). Internet facility at GNDU: A survey. National Seminar on Academic Libraries in the Modern Era, Organized by IASLIC, 4-6 December 2000, Bhopal, p. 119-124. *Internet and Its Use in the Engineering Colleges of Punjab, India: A Case Study*. Retrieved on 7th March 2015 from <http://www.webology.org/2005/v2n4/a21.html>
- Kumari, A. (2013). *A study of perceived influence of internet use on social competence, emotional maturity and general well-being of adolescents*. Ph.D. thesis. Rohtak: Department of Education, Maharshi Dayanand University, 368-406. Retrieved on 9th November 2014 at 7.40 pm from <http://shodhganga.inflibnet.ac.in/handle/10603/7814>.
- Mishra, O.P., Yadava, N., & Bisht, K. (2005). *Internet Utilization Pattern of Undergraduate Students*. *University News*, 43(13), 8-12. Retrieved on 7th March 2015 from <http://www.webology.org/2005/v2n4/a21.html>
- Pandey, D.K. (2014). Effect of excessive internet usage on the level of adolescents' Techno-Stress. *International Educational E-Journal*, 3 (2), 2277-2456. Retrieved on 10th November 2014 at 9.00 pm from <http://www.oijr.org/ejournal/apr-may-june2014/34.pdf>
- Tarafdar , M. , Tu, Q . & Ragu-Nathan, T. S. (2011). Impact of technostress on end-user satisfaction and performance. *Journal of Management Information Systems*, 27 (3) , 303-334. Retrieved on 12th November 2014 from <http://mesharpe.metapress.com/content/n1q6v20843738615/>
- The American Heritage Dictionary (1986). *Dell Publishing Co., Inc*. Retrieved on 18th November 2014 from <http://education.illinois.edu/wp/original/access/gender.html>
- Thomee, S. , Eklof,M., Gustafsson, E., Nilsson, R. & Hagberg, M. (2007). Prevalence of perceived stress, symptoms of depression and sleep

disturbances in relation to information and communication technology (ICT) use among young adults – an explorative prospective study. *Computers in Human Behavior*, 23 (3), 1300-1321. Retrieved on 10th November 2014 from <http://www.sciencedirect.com/science/article/pii/S0747563204002250>

Teo, S.H. (2001). Demographic and motivation variables associated with internet usage activities. *Internet Research*, 11 (2) , 125-137 . Retrieved on 11th November 2014 from <http://www.emeraldinsight.com/doi/abs/10.1108/10662240110695089>

Teo , S. H. & Lim, K. G. (2000). Gender differences in internet usage and task preferences. *Behaviour & Information Technology*, 19 (4), 283-295. Retrieved on 10th November 2014 at 8.00 pm from <http://www.tandfonline.com/doi/abs/10.1080/01449290050086390#.VGdnVWfE13J> .

Teo , S. H. , Lim , K. G. & Laia, R. Y.C. (1999). Intrinsic and extrinsic motivation in internet usage. *Omega*, 27 (1), 25-27. Retrieved on 10th November at 8.10 pm from <http://www.sciencedirect.com/science/article/pii/S0305048398000280> .

Tu,Q.,Wang,K. & Shu,Q.(2005). Computer-related technostress in China. *Communications of the ACM - Transforming China*,48(4),77-81. Retrieved on 7th March 2015 from <http://dl.acm.org/citation.cfm?id=1053323>

Voorbij, H. (1999). Searching for scientific information on the Internet: A Dutch academic user survey. *Journal of the American Society for Information Science*, 50(7), 598-615. Retrieved on 7th March 2015 from <http://www.webology.org/2005/v2n4/a21.html>

Wang, K.& Shu, Q. (2008). The moderating impact of perceived organizational support on the relationship between technostress and role stress.*Information Management and Business*

Weiser, E.B. (2004). Gender differences in internet use patterns and internet application preferences: A two-sample comparison. *Cyber Psychology and Behaviour*, 3 (2), 167-178.