

Internet Usage and Different Domains of Lifestyle of University Students in Relation to Their Sex Differences

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Abstract

The present study was specifically targeted to determine the effect of Internet-use and Internet Non-use on the Lifestyle of university students with special reference to their gender difference. Sample of 600 (300 Internet-users and 300 Internet-Non-users) university students was taken randomly from University of Kashmir (J&K), India. Lifestyle Scale by S. K. Bawa and S. Kaur was used to collect the data. Besides, Information Blank developed by the investigators was used to ascertain the Internet-users and Non-users. The data was subjected to statistical analysis by computing Mean, S.D. and test of significance. The results concluded that Internet-users and non-users differ significantly in lifestyle. Internet-users were found better in lifestyle status. The difference between the Internet-user group of subjects found significantly different on gender but the difference between the Internet Non-users group on the gender could not be established.

Keywords: Lifestyle; Internet-usage; Domains; Lifestyle; University Students; Sex.

Introduction

The last two decades have witnessed a revolution caused by the rapid development of Information and Communication Technology (ICT). It is difficult and maybe even impossible to imagine coming society that is not supported, in one way or another, by Information and Communication Technology (ICT). An information world, called the cyber world, comes into being between the social and physical worlds. When looking at the current widespread diffusion and use of ICT in modern societies, especially by the young the so-called digital generation before then it should be clear that ICT will affect the complete way of life today and in the future. While the ICTs in general and the Internet in particular are one of the most important and complex innovations of mankind, it is a marvelous plastic technology, amenable to a wider range of uses. As the number of people who use the Internet is growing, most people now accept that the Internet is a revolutionary new medium that has changed our life style completely. It has significantly impacted the lifestyle of everyone and mostly the students; changing the way they work, live and learn (Gates, 2000). As we are approaching a new millennium, the Internet was revolutionalising our society, our economy, our education and our technological system. No one knows for certain how far, or in what direction, the Internet will evolve. Ciboh (2007) affirms that "modern media of communication, first the printed word, then radio and television and motion pictures, and now the Internet, have taken the place of the traditional systems of communication" through which valuable information can be obtained. If there were a vote for the thing which had influenced people's lives most in the 21 century, it is no doubt that there are few things more deserving of the words "most significant "than the Internet. The widespread availability of resources on the Internet and their potential uses in educational settings has driven much debate in their use. This is a universal fact that the use of Internet has a great impact on education. It has made considerable and dramatic impact on contemporary educational practice (Chou, et al., 2002). Researches on the use of the Internet in education indicate that seeking information on the Internet has become the first choice option for many people, especially for students (Cole et al., 2002). Today's students integrate technology into all aspects of their lives for multiple purposes, particularly academics, socializing, entertaining and shopping (Asselin, Moayeri, 2008). With the increased role of modern technology in the students' lives has come the increased concern about how students might be affected. Dehmler (2009) asserted that students today are growing up in an interconnected, networked world; they have unprecedented access to modern technologies and use them in expected and unexpected ways.

Numerous studies identified that university students prefer to use the Internet for their information need more than traditional print sources due to being a quickly and easily available resource (Omidian, 2011). Webbased learning has shifted traditional face-to-face classroom instruction toward a virtual learning environment. Beyond time and space barriers, web-based learning not only provides a novel learning experience to learners, but it also takes advantage of technology to create a "learners-centered" learning atmosphere (Simonson *et al.*, 2006). In such a perspective, different from the traditional "teacher-centered" learning setting, web-based learners face a transition of changing familiar methods of learning, and assume an independent role to become self-directed learners (Long, 2003). In the academic perspective, the Internet hosts and allows access to subject gateways, databases and websites which contain various types of scholarly resources like electronic copies of journals, articles, books, datasets, short communications, formula, monographs, encyclopaedia, dictionaries, instructional notes, informative web-pages and research related websites. In this way Internet provides several opportunities for the academic world.



The Internet brings the new lifestyle to the students, at the same time how to take the use and non-use of the Internet becomes an urgent issue. Internet use undermines well-being because online connections are weaker than real-life connections, or because online connections are often used to replace real-life relationships and activities. Some even go so far as to implicate Internet use as a causal factor for psychological harm among users (Eastin & LaRose, 2000). Yet other studies suggest that the Internet can have direct negative effects (Choi, 2007; Sirgy, Lee, & Bae, 2006), such as social isolation, depression, loneliness, and difficulties with time management. Kraut *et al.* (2002) Internet use was not associated with loneliness but increased stress was related to greater Internet use. Nie (2001); Lloyd *et al.* (2007); Morgan & Cotton, (2003); Nie, (2001); Hillygus, & Erbring, (2002); Weiser, (2001); Nalwa & Anand (2003) Internet use has been found to be associated with negative personal and social developmental outcomes. Therefore, time spent on online activities may cut other activities such as reading and social interaction, which are essential to normal development. Hashim (2008); Scully (2000) & Todd (1992) stated that Internet users have the problem of social tolerance and poor communication.

Moreover, increased Internet use has been positively associated with antisocial behavior (Mesch *et al.* 2007) Researchers analyze Internet use and its connection to the quality of social relationships and lower the quality of social relationships (Morgan & Cotten, 2003). Internet is making people isolated, depressed and lonely. People who use Internet remain cut off their environment and lose face to face relations which are strong by spending time in virtual reality with unknown people, which results in weaker relations.

Gender differences in Internet usage are another attractive concern of the research studies. Odell, Korgen et al. (2000); Jackson, Ervin, Gardner & Schmitt (2001) stated that there was virtually no gender gap in Internet use among students. Odell et al. (2000) the gap in use of the Internet among male and female students has nearly closed, there remain differences in how male and female students use the Internet. Whilst the findings concerning gender differences in overall Internet use are equivocal, a number of studies have nevertheless replicated data that indicate there may be some consistent differences in the purposes for which males and females use the Internet between a number of nations and age groups. According to Shaw & Gant (2002) no gender differences are detected when participants are involved in various online activities such as synchronous and dyadic chat sessions. The bias is seen even though both girls and boys are equally comfortable and show positive feelings toward the Internet. Jackson et al. (2001), (2000), Nachmias et al. (2000) Schumacher et al. (2001) Durndell & Haag (2002) does not provide consistent evidence for the presence or otherwise of a gender gap in Internet use across different groups of males and females. On the other hand Weiser (2000); Morahan-Martin & Schumacher (2000); Shashaani (1997); Ono & Zovodny (2003); Mishra, Yadav & Bisht (2005) reported that there is significant gender difference in Internet usage. Concern about gender inequality has now shifted from access to intensity. Skills do play an important role in framing gender inequalities in terms of Internet usage. Skills are the user's ability to locate content online effectively and efficiently. Therefore, men and women may differ significantly in their attitudes towards their technological abilities (Hargittai & Shafer, 2006). Results vary depending on the demographics of the sample on which the research was performed. Most studies indicated male domination in terms of usage of, and attitude towards, the Internet; fewer studies showed otherwise

However, since the Internet was born, it is generally acknowledged that its appearance, not only brings convenience to mankind, but also may cause a great deal of potential problems too. The benefits of the Internet have been widely researched. Despite the positive effects of Internet, there is growing literature on the negative effects of its use. According to Hicks (2002) Internet is a double-edged sword, although some welcome it as a panacea while others fear it as a curse, all would agree that it is quite capable of transforming society. Every year thousands of young students register at universities. It becomes clear that not all of them have the necessary skills to work with all of the ICT resources available to them. Indeed, upon closer inspection many of the studies actually convey a sense that not all students are as inclined to integrate Internet use into their routine life and studies as might be assumed. Users and Non-users have different ideas of what the online world is like. A new type of digital exclusion is emerging due to this variation of usage and appropriation. Digital exclusion does not only occur among those who do not have access but expands to those who cannot use the Internet effectively. According to Brotcorne (2005) students' use or non-use of the Internet was not always due to a disadvantage but 'more due to matters of "digital choice" rather than "digital divide". Users/nonusers dichotomy is too crude and superficial to finely analyze disparity in engagement with new technologies. With regards to Internet use we find a high proportion of studies on different categories of people. But university student population has thus far not specifically been looked at. In light of the fact, it was found that there is paucity of research linking to Internet usage among University students i.e. Use and Non-use of Internet in Indian context. The purpose of this study is to fill this gap in knowledge by providing an insight to determine the influence of Internet-use and Non-use on life style, among university students in Kashmir (J&K).

Objectives of the Study

The following objectives have been formulated for the present investigation:



- 1. To identify Internet-users and Internet Non- users.
- 2. To compare the Lifestyle of Internet-users and Internet Non- users.
- 3. To compare the Lifestyle of Male Internet-users and Female Internet-users.
- 4. To compare the Lifestyle of Male Internet Non-users and Female Internet-Non-users.

Hypotheses of the study

Following hypotheses have been framed for the proposed investigation:

- 1. There is a significant difference between the mean scores of Internet-users and Internet Non- users on their Lifestyles.
- 2. There is a significant difference between the mean scores of Male Internet-users and Female Internet-users on their Lifestyles.
- 3. There is a significant difference between the mean scores of Male Internet Non-users and Female Internet–Non-users on their Lifestyles.

Methodology and Procedure

Descriptive study was conducted in University of Kashmir. The study population comprised students from three fields of study namely sciences, social sciences and Arts.

Sample

A sample of 600 post graduate students 300 Internet-users (150 Male and 150 Female) and 300 Internet Non-users (150 Male and 150 Female) were selected through stratified random sampling technique from various departments of three faculties i.e. (faculty of Science, faculty of Social science and faculty of Arts) of University of Kashmir, (J&K) India. It needs to be mentioned that the subjects (Internet-users and Internet Non-users) reading in 3rd and 4th semester has been considered the sample for the present study.

Collection of data

Tools

- 1. *Information Blank:* Self constructed *Information blank* for the identification of Internet-users and Internet Non-users. This Information blank was developed by investigator with the purpose to ascertain the Internet-users and Internet Non- Users. In the present study *Internet-Users* are those university students who have direct access to the worldwide network and have their own exposure and skill to use Internet and have minimum of one year's experience of Internet usage are considered as Internet-users. On the other hand Internet-*Non-users* are those university students who have no direct access to the worldwide network and have no their own exposure and skill to use Internet. Those who can be described as Non-users are respondents who claim not to have used the Internet or who did not list any Internet activities, leaving all of the possibilities blank.
- 2. Life Style Scale: In the present study, Lifestyle assessed by the dominant set of scores as measured by Lifestyle Scale by S. K. Bawa and S. Kaur (LSS-BK). This scale consists 60 items (43 positive and 17 negative items) to measure the lifestyle of the students in six different dimensions: I. Health Conscious Life Style, II. Academic Oriented Lifestyle, III. Career Oriented Lifestyle, IV. Socially Oriented Lifestyle, V. Trend Seeking Lifestyle, and VI. Family Oriented Lifestyle.

Statistical analysis and Interpretation

Table 1.00: Showing the Significance of difference between the Mean Score of Internet-users and Internet Non-users on Lifestyle (N = 300 each)

	Dimensions of Lifestyle	Group	Mean	S.D.	SEM	t-value	
I.	Health Oriented Lifestyle	IUs	30.06	3.138	0.181	4.24**	
		INUs	29.13	2.195	0.127	4.24	
II.	Academic Oriented Lifestyle	IUs	26.42	2.159	0.125	13.21**	
		INUs	23.80	2.770	0.160	13.21	
III.	Career Oriented Lifestyle	IUs	24.94	3.478	0.201	8.88**	
		INUs	22.39	3.290	0.190	0.00	
IV.	Socially Oriented Lifestyle	IUs	22.30	1.599	0.092	14.82**	
		INUs	24.29	1.657	0.096	14.02	
V.	Trend Oriented Lifestyle	IUs	19.93	2.836	0.164	9.93**	
		INUs	17.62	3.137	0.181	9.93	
VI.	Family Oriented Lifestyle	IUs	36.31	3.448	0.199	13.37**	
		INUs	39.93	3.142	0.181	13.37	
Total		IUs	159.95	8.125	0.469	4.62**	
		INUs	157.16	6.890	0.398	4.02	

Note: **p<0.01; ***p<0.05; *Insignificant

Index: *IUs =Internet-users*

INUs =Internet Non-Users



Table 1.00 exhibits the significance of mean difference between the Internet-users and Internet Non-users on various dimensions of Lifestyle. Fleeting look at the table reveals that there is a significant mean difference between the two groups on all the six dimensions and on composite score of lifestyle. The obtained 't'-value came out to be (t=4.62) which is significant at 0.01 level of confidence. Mean difference favours Internet-users (M=159.59) which is comparatively higher than Internet Non-users (M=157.16). Therefore it has been found that the Internet-users were found to have a tendency to adapt better lifestyle. While comparing the two groups on each of six dimensions of lifestyle. Internet-users were found to have a tendency to adapt better lifestyle on four dimensions of lifestyle i.e. Health Oriented Lifestyle, Academic Oriented Lifestyle, Career Oriented Lifestyle and Trend Oriented Lifestyle. On the other hand Internet Non-users were found to have tendency on two dimensions of lifestyle i.e. Socially Oriented Lifestyle and Family Oriented Lifestyle.

Figure 1.00: Showing the Significance of difference between the Mean Score of Internet-users and Internet Non-users on Lifestyle (N = 300 each)

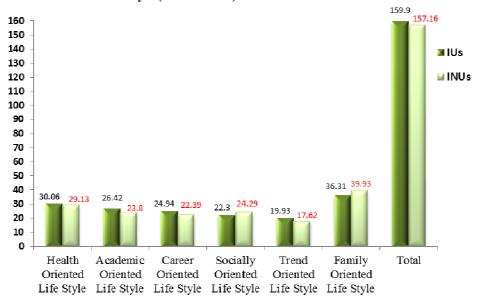


Table 2.00: Showing the Significance of difference between the Mean Score of Male and Female Internetusers on lifestyle (N = 150 each)

	Dimensions of Lifestyle	Group	Mean	S.D.	SEM	t-value
I.	Health Oriented Lifestyle	MIUs	29.65	3.453	.282	1.54*
		FIUs	30.26	3.469	.283	1.34
II.	Academic Oriented Lifestyle	MIUs	25.09	3.342	.273	4.31**
	-	FIUs	26.62	3.009	.246	4.31
III.	Career Oriented Lifestyle	MIUs	26.25	4.082	.333	4.91**
	-	FIUs	23.75	4.964	.405	4.91
IV.	Socially Oriented Lifestyle	MIUs	21.20	2.913	.238	0.99*
		FIUs	21.51	2.694	.220	0.99
V.	Trend Oriented Lifestyle	MIUs	18.45	5.738	.468	8.30**
		FIUs	22.76	2.907	.237	6.30
VI.	Family Oriented Lifestyle	MIUs	35.58	5.219	.426	1.91*
		FIUs	36.63	4.909	.401	1.91
		MIUs	156.21	11.706	.956	4.11**
Total	l	FIUs	161.53	11.426	.933	4.11

Note: **p<0.01; ***p<0.05; *Insignificant Index: *M IUs =Male Internet-users*

FIUs =Female Internet-users

Table 2.00 shows the significance of mean difference between the male and female Internet-users on various dimensions of Lifestyle. The two groups have been found significantly different on three out of six dimensions and on composite score of Lifestyle at 0.01 level of confidence. The obtained 't' - value came out to be (t=4.11) which is significant at 0.01 level of confidence. Mean difference favours female Internet-users (M=161.53) which is comparatively higher than the male Internet-users (M=156.21). It has been found that female Internet-users have a tendency to adapted better lifestyle. While comparing the two groups on various



dimensions of lifestyle, female Internet-users were found to have tendency to adapt the better Academic Oriented Lifestyle and Trend Oriented Lifestyle. Whereas male Internet-users found to have a tendency to adapt better Career Oriented Lifestyle. On the other hand, rest of the three dimensions of lifestyle, the difference between the mean score of the two groups could not be established. This can be said that male and female Internet-users have more or less similar Lifestyle with respect to the Health Oriented Lifestyle, Socially Oriented Lifestyle and Family Oriented Lifestyle.

Figure 2.00: Showing the Significance of difference between the Mean Score of Male and Female Internetusers on lifestyle (N =150 each)

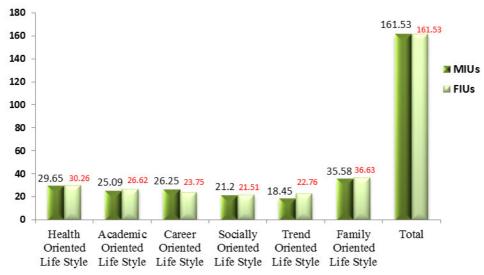


Table 3.00: Showing the Significance of difference between the Mean Score of Male Internet-users and Non-users on lifestyle (N = 150 each)

Dimer	nsions of Lifesty	·le	Group	Mean	S.D.	SEM	t-value
I.	Health	Oriented	MIUs	29.65	3.453	.282	4.28**
	Lifestyle		MINUs	27.80	3.619	.296	4.20
II.	Academic	Oriented	MIUs	25.09	3.342	.273	5.07**
	Lifestyle		MINUs	22.97	4.039	.330	3.07
III.	Career	Oriented	MIUs	26.25	4.082	.333	4.83**
	Lifestyle		MINUs	23.51	5.145	.420	4.63
IV.	Socially	Oriented	MIUs	21.20	2.913	.238	8.38**
	Lifestyle		MINUs	23.56	2.035	.166	0.30
V.	Trend	Oriented	MIUs	18.45	5.738	.468	2.14***
	Lifestyle		MINUs	17.21	4.104	.335	2.14
VI.	Family	Oriented	MIUs	35.58	5.219	.426	4.24**
	Lifestyle		MINUs	37.83	4.944	.404	4.24
Total		MIUs	156.21	11.706	.956	2.63**	
		MINUs	152.88	9.583	.782		

Note: **p<0.01; ***p<0.05; *Insignificant

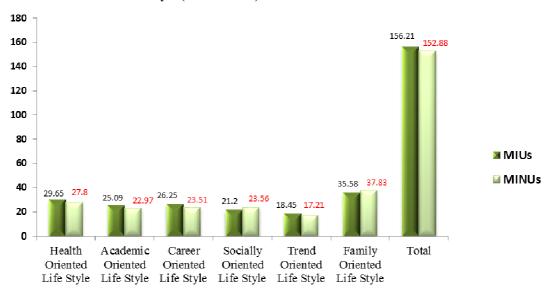
Index: *MIUs =Male Internet-users*

MINUs = Male Internet Non-Users

Table 3.00 depicts the significance of mean difference between the male and female Internet Non-users on various dimensions of lifestyle. It has been found that the two groups differ significantly on three out of six dimensions of lifestyle. But the two groups failed to arrive at any level of significance on its composite score. The computed 't-'value have been found insignificant, i.e. the difference between the two groups of subjects on Lifestyle could not be established. While comparing the two groups on each of six dimensions of lifestyle, male Internet Non-users were found to have a tendency to adapt the better Health Oriented Lifestyle. However, female Internet Non-users were found to have a tendency to adapt the better Socially Oriented Lifestyle and Family Oriented Lifestyle. Rest of the three dimensions i.e. Academic Oriented Lifestyle, Career Oriented Lifestyle and Trend Oriented Lifestyle the two groups failed to arrive at any level of significance. This can be said that the male and female Internet Non-users have more or less similar lifestyle on these three dimensions of Lifestyle.



Figure 3.00: Showing the Significance of difference between the Mean Score of Male Internetusers and Non-users on lifestyle (N = 150 each)



Discussion and Conclusion

The comparative analysis of Internet-users and Internet Non- users reveals significant difference on various dimensions of lifestyle. The two groups were found significantly different on all the six dimensions and on composite score of lifestyle. The mean difference favours Internet-users which signifies that Internet-users have a tendency to adapted better lifestyle. On four out of six dimensions of lifestyle, Internet-users have been found to have a tendency to adapt better Health oriented lifestyle, Academic oriented lifestyle, Career oriented lifestyle and Trend oriented Lifestyle. On the basis of these results it can be inferred that Internet-users remain conscious about keeping themselves physically fit and fine. They often acquire knowledge about health oriented issues. They read books on health and do physical exercise to maintain their health and consult physical experts for regular medical checkups. They much more conscious about the dietary and hygienic related issues to maintain their health. They also manage their day to day activities as they keep themselves fit and healthy. Internet-users remain involved in academic field and spend maximum time on studies and study whole syllabus. They read reference books along with text books and used mostly technology to get information. They often consult library and watch academic programmes. They were aware of different career options available for them and always keen to gain knowledge related to their career. They frequently interact with people related to their career and discuss career related concerns with their peer groups. They selected the area of education in which they are interested and opt subjects keeping their career in mind. Internet-users are also very keen to adopt new fashion and always willing to update themselves with new trends and are very much eager to opt new fashion. They always do chatting on Internet and frequently read fashion magazines. They prefer to adopt new fashion which affected their daily life routines like dressing, purchasing and enjoyment. So it can be said that the use of Internet among university students has been bringing a fundamental change in their life style. University students found to use the Internet for of health related information. They seemed more career conscious and mostly they use Internet as educational tool. It is a good source of getting the right information and solution to problems in an academic environment.

On the other hand Internet Non- users have been found to have tendency on only two dimensions of lifestyle i.e. Family oriented lifestyle and socially oriented lifestyle. It reflects that Internet Non- users always remain in close touch with the family and share each and every moment of daily activities with family. They devote maximum time towards their family and maintain their family values. They discuss daily activities with family and prefer to remain part of their family. They respect their family and maintain their family values and aspiration and also greet their family on all occasions. They celebrate festivals with their family and prefer to go on tour only with their family. They do not talk about the family disputes and do not discuss the same with their peer group. They also spend money to maintain their family status. They also participate in social activities and enjoy every social gathering. They frequently consult their friends and help them in their adversities. They share things with others and always keep in mind views of society while doing everyday activities. They were interested in social services and are always keen to do good for society and also interested in expanding their social boundaries. It is likely to say that Internet use reduces the time available for family and friends and may account for the drop in well being or increase in loneliness. Internet-users lacks social presence, promotes a depersonalized experience, and reflects reduced social interaction. Therefore Internet use may ultimately



resulting in lesser communication among the family members and may lead to their isolation and reduce their desire to live in a social and family environment. The more a person enters Internet's intimate atmosphere, the more he is isolated from family values, which is most probably the result of exchanging Internet for family. In other words, Internet use, cause avoiding major life activities in order to spend more time on the Internet, reducing social relationships and ignoring friends and family. It has been argued that Internet use is negatively associated with family time. The main contention is that time spent on one activity cannot be spent on another. Internet use is a time-consuming activity. Internet use might have a negative effect on family communication and closeness. This concern has received empirical support from some important studies as Nie (2001); Lloyd et al. (2007) which, based on family time diaries, found that Internet use at home was negatively related to time spent with family. Furthermore, the reduction in family time was higher for the average Internet user. Internet use effect the student's quality of their relationships with parents and friends and non Internet use was associated with better relationships with family and society. Therefore, not only Internet becomes a replacement for social activities, but also becomes a replacement for strong social relationships too. On the whole, it can be said that Internet use may lead to adverse effects and social damages among the students. These results corroborate previous studies as Orose Leelakulthanit, 2013; Mitchell et al., 2009; Lewis et al., 2009; 2007; Asan & Koca, 2006; Chinwe, 2006; Veenhof, 2006; 2007; Mesch 2006; Morgan & Cotton, 2003; Kraut et al., 2002; Katz et al., 2001; Ofosu, 2001.

On the other hand male and female Internet-users were found significantly different on three out of six dimensions and on composite score of lifestyle. It can be asserted that female Internet-users have a tendency to adopted better lifestyle. It was observed that two groups were found significantly different on three out of six dimensions of lifestyle i.e. Academic oriented lifestyle, Career oriented lifestyle and Trend oriented lifestyle. Female Internet-users found to have tendency to adapt the better Academic oriented lifestyle and Trend oriented lifestyle, whereas male Internet-users have a tendency only to adapt better Career oriented lifestyle. Female Internet-users remain involved in academic field and spend maximum time on studies and study whole syllabus. They were keen to adopt new fashion and always willing to update themselves with new trends and are very much eager to opt new fashion. They always do chatting on Internet and frequently read fashion magazines. They prefer to adopt new fashion which affected their daily life routines like dressing, purchasing and enjoyment. On the other hand male Internet-users have a tendency only to adapt better Career oriented lifestyle. It reflects that they are always aware of different career options available for them and always keen to gain knowledge related to their career. However, in rest of the three dimensions of lifestyle, the difference between the mean score of the two groups could not be established. It can be said that male and female Internet-users have more or less similar lifestyle with respect to the Health oriented lifestyle; Family oriented lifestyle and socially oriented lifestyle. While comparing the lifestyle of male and female Internet Non-users. It has been found the two groups were found significantly different on three out of six dimensions of lifestyle. But on the composite score the two groups failed to arrive at any level of significance. While comparing the two groups on each of six dimensions of lifestyle, male Internet Non- users have found to have a tendency to adapt the better Health oriented lifestyle. It reflects that male Internet Non- users remain conscious for keeping themselves physically fit and fine. They often acquire knowledge about health oriented issues and read books on health. They do physical exercise to maintain their health and consult physical experts for regular medical checkup. They were very much conscious about the dietary and hygienic related issues to maintain their health. They also manage their day to day activities as they keep themselves fit and healthy. However, female Internet Non- users have been found to have tendency to adapt the better Family oriented lifestyle and socially oriented lifestyle. It may be that female Internet Non- users remain always in close touch with the family and shares each and every moment of daily activities with family. They were interested in social services and are always keen to do good for society and also interested in expanding their social boundaries. Rest of the three dimensions i.e. Academic oriented lifestyle, Career oriented lifestyle and Trend oriented lifestyle, the two groups failed to arrive at any level of significance, i.e. the difference between the mean score of the two groups could not be established. This can be said that both groups have more or less similar lifestyle in these three dimensions of lifestyle. The results run parallel to the findings of the various researchers in the field (Wanajak, 2011; Chen and Tsai, 2007; Wolak et al., 2003; Durndell & Haag, 2002; Shaw; Lindsay & Larry, 2002; Shaw & Gant, 2002; Jackson et al., 2001; Houtz & Gupta, 2001; Tsai, Lin & Tsai, 2001; Williams, 2001).

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