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A Sociological Study on the Influence of Social Networking Sites on the Interpersonal Relationships of College Students in Bangalore and Mysore Cities of India

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Abstract

In India at present the usage of Social Networking Sites (SNS) amongst college going students has vastly increased and the usage of SNS has extensive influence on these students in numerous ways, particularly on their interpersonal relationships. The present study is placed in this context to examine the influence of SNS on interpersonal relationships of college students and also to construct a profile which can capture the college students' usage pattern of SNS. Five hundred college students were selected from both Bangalore and Mysore cities for generating primary data; questionnaire and interview schedule methods were used for the said purpose. In the present study the concept of social network and social networking sites are explained in detail through sociological perspective. A greater section of this article is dedicated for discussing the growth of SNS in India, particularly among the college students. It was found that the usage of SNS has effect on interpersonal relationships of college students, particularly with their members of family, friends and teachers. It was also found that due to the availability of SNS the communication between college students' usage pattern of SNS, their purpose of usage of SNS, the amount of the time they spend, their preferred SNS, degree of their trustworthiness of online friends and much more interesting aspects have been dealt keeping the scientific research as base. It provides an outlook for investigating the technological implications on society in the domain of sociology.

Keywords: Social networking sites, interpersonal relationships, college students, social network, communication.

Introduction

In the last decades of the 20th century the world in general, and India in particular witnessed a remarkable and rapid advancement of information and communication technologies. During this era "communication" emerged as the most popular term. Today the communication revolution has brought people together regardless of geographical boundaries.

From time to time, new communication technologies have been invented for better individual as well as mass communication. First, by the invention of the printing technology the new era of mass communication began. Then, the invention of wireless communication, Radio. Later, the invention of Television made an immense impact all over the world. And, recently, Internet has emerged as the outstanding innovation in the field of communication in the history of humankind¹.

Rapid expansion of internet has changed the lives of many people worldwide. Very significantly internet has brought the world into a single room. Right from getting access news across the world to a wealth of shopping knowledge, job opportunities, and choice of life partners there is a whole gamut of information available to internet users. Internet is now used for communication, entertainment and information. For a long time access to 'information' used to be denied to the people on the basis of their gender, class or caste. But today these barriers are being breaking down by the Knowledge Revolution².

The contemporary period has come to be labelled variously as Information Age, Communication Age and, the present Networking Age. The internet offers a wide variety of communication tools. Billions of people use facilities like search engines, web pages, e-mails, e-books, e-journals, e-newspapers, internet banking, internet telephony, conferencing, multi-media sharing, online news rooms, gaming, shopping, blogging, and importantly, social networking. Today internet is an essential communication medium in professional as well as personal life³.

Among the various tools that internet has brought our way Social Networking became a global phenomenon. Millions of people now go online to engage in social networks⁴. According to Wikipedia, an online encyclopaedia, there are more than 300 Social Networking Sites (SNS) and 1.5 billion members worldwide. In recent years, usage of social networking sites has grown rapidly. It took 38 years to attract 50 million listeners for wireless radio system, 13 years for television to attract 50 million viewers; in 4 years the internet has attract 50 million surfers. IPods took 3 years to reach 50 million users, but Facebook, one of the leading social networking sites, added over 200 million users in just 12 months. This shows the penetration capacity and popularity of social networking sites⁵.

Social Networking Sites are a type of virtual community that has grown tremendously in popularity⁶. Through social networking people can use network of online friends and group memberships to keep in touch with current friends, reconnect with old friends or create real-life friendships through similar interest or groups. Besides, establishing social relationships, social networking members can share interest and their ideas with other life-minded members by joining groups or forums. They can also participate in discussions through SNS. Members will be updated instantly about their friends and groups. In short, a SNS is a hub for communication, entertainment and information⁷.

Apparently it is evident that the majority of the users of social networking sites are college going students, worldwide. Students are one group that is eager to know the technological advancements and latest trends and they accept these changes with an open mind. In India too this fact is acknowledged by various studies and hence today the usage of SNS has become large part of the student's lives in Indian society⁸. The EDUCAUSE data shows that the percentage of students who said they never use SNS has fallen from 25% to 11% in 2008⁹.

The increasing usage of social networking sites has far reaching impacts on interpersonal relationships of students, which is the major theme of the present study. SNS influence the interpersonal relationships of students in many ways¹⁰. For example through SNS, users come to meet other people and these people can affect the user's relationships and this influence can either be positive or negative for the users. An interpersonal relationship is a relatively long-term association between two or more people. This association may be based on emotions like love and liking, regular business interactions, or some other type of social commitments. Interpersonal relationships take place in a great variety of contexts, such as family, friends, marriage acquaintances, work, and neighbourhoods¹¹. They may be regulated by law, custom, or mutual agreement and are the basis of social groups and society as a whole. These impacts are so widespread that they caught the attention of social scientists worldwide. However, the range of studies conducted to deal with the usage of SNS among college students is negligible in India. Hence, the proposed study makes an attempt to fill in this gap, to some extent, by concentrating on the impact of SNS on college students.

Methodology

This study primarily uses descriptive research design. The survey technique is used to collect demographic data about respondent's behaviour, beliefs, opinions, interests and the like and the data thus generated is organized, analysed and interpreted. A purposive sample of college students in Bangalore and Mysore cities was selected for eliciting the study data. 500 students were selected from ten colleges in Bangalore and Mysore cities. A detailed list of all the colleges providing education for degree courses and pre-university level in Bangalore and Mysore cities was obtained from university sources.

The primary data for this study was generated from four selected colleges in Bangalore and Mysore cities. The choice of Bangalore city is primarily rooted in the fact that it is considered India's IT hub and is also home to the highest number of Internet connections in the state. Further, these cities have large number of educational institutions and colleges, where majority of the students are well aware of the modern information technologies and studies have shown that they are constant users of social networking sites.

Bangalore is the capital city of Karnataka state, located in the south-eastern part of Karnataka, having the population of 84,25,970 (2011) and it is known as India's third most populous city and fifth-most populous urban agglomeration. A demographically diverse city, Bangalore is a major economic and cultural hub and the second fastest growing major metropolis in India. Bangalore is home to many well-recognized colleges and research institutions in India. There are 540 colleges affiliated to Bangalore University, 150 MBA colleges and more than 50 Engineering colleges in Bangalore¹².

Mysore is one of the important cities in Karnataka state and it is the second-largest city in the state. According to the census of India – 2011, the population of Mysore is 8,87,446. Mysore is also called as a traditional city and it is located southwest of the state capital Bangalore. In Mysore tourism is the major industry. There are more than 127 colleges are affiliated to the University of Mysore¹³.

In order to gather data from the respondents questionnaire, interview schedule and survey forms as research instruments were used as research tools. The Questionnaire which is the primary tool of data collection is framed taking into consideration the primary objectives of the study. With the help of few sample questions a brief questionnaire was distributed to all the selected colleges in order to identify the users of SNS. After collecting these questionnaires, a list of the respondents who are SNS users was organized and the copies of the main questionnaire were circulated.

Objectives of the Study: i. To engage in a Sociological analysis of the concept of 'interpersonal relationship' with a special focus as the changing nature of inter-personal relationships. ii. To analyse the growth in the number and the pattern of impact of Social Networking Sites on college going students, particularly on their changing interpersonal relationships.

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Social Network and Social Networking Sites: In the discipline of sociology the concept of 'social network' refers to a social structure made up of individuals who are connected to each other and have a complex set of relationships or ties between themselves. In the study of society the analysis of social network is vital. Today social network analysis has become one of the major paradigms in contemporary sociology. Emile Durkheim, Ferdinand Tonnies, George Simmel, Jacob L. Mareno, Bronislaw Malinowski, Alfred Radcliffe – Brown, Claude Levi-Straus, John A. Bareen and many other sociologists have given prime place to social network in their respective studies¹⁴.

George Simmel, a German sociologist stated at the importance of studying social network by emphasizing the dynamics of triads and web of group affiliations. It is also important to note that another eminent sociologist Jacob Mareno had developed the first sociograms in the 1930s to study interpersonal relationships. The major theme of social network is to understand social interaction is that social phenomena should be primarily conceived and investigated through the proportion of relation between and within units¹⁵.

Hence, the inner base for the creation of SNS is nothing but the concept of social network. Social Networking Sites can be broadly defined as internet-based social spaces designed to facilitate communication, collaboration, and content sharing across networks of contacts¹⁶. Social Networking Sites allow users to manage, build and represent their social networks online. People use Social Networking Sites for countless activities. Among the most common uses are, connecting with existing networks, making and developing friendships/contacts, creating an online presence for their users, viewing content/finding information, creating and customizing profiles and so on¹⁷.

Boyd and Ellison define Social Networking Sites as "web-based services that allow individuals to i. construct a public or a semi-

public profile within a bounded system, ii. articulate a list of other users with whom they share a connection, and iii. view and traverse their list of connections and those made by others within the system"¹⁸.

Wikipedia defines Social Network Sites as an online platform that focuses on building and reflecting social networks or social relations among people who share interests and activities. Social Networking Sites, E-mail, instant messaging, view-and photosharing sites and comment posting are all tolls that help people to communicate and socialize with each other¹⁹.

A social network is a collection of individuals linked together by a set of relations . Online social networking sites 'virtually' link individuals, who may or may not 'know' each other. They enable rapid exchange of knowledge, high levels of dialogue and collaborative communication through text, audio and video. Individual actors have ties with other individual actors. In this sense, these individual actors interact/share their interests, ideas/information with others²⁰.

Usage Pattern of Social Networking Sites in India: Currently the usage of SNS is continuously growing prominence in India. Will Hodgman says that "Social networking continued to grow strongly in India this past year, with several of the top global brands carving out a more prominent position"²¹, and he also says that "The social networking phenomenon continues to gain steam worldwide, and India represents one of the fastest growing markets at this moment". "While there is certainly room for several players in this social networking space in India, the sites that have the right blend of having both a strong brand and cultural relevance will be best positioned for future growth"²². Today India ranks as the third largest market for the usage of social networking worldwide, after the U.S., China. There are certain modifications were being made to increase the popularity of SNS in India particularly by providing the service in few regional languages²³

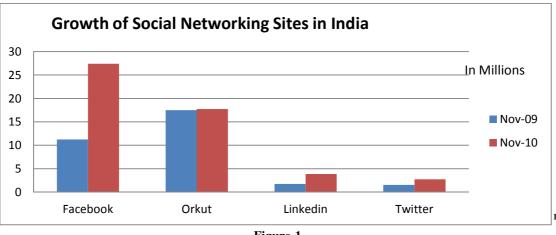


Figure-1 Growth of Social Networking Sites in India

International Science Congress Association

Analysis and Interpretation: The above table No.1 gives general information of the respondents. The total size of the sample is 500. 250 were selected from Bangalore city and another 250 were from Mysore city. These 500 college students were further divided into two more sections on the basis of their level of education and gender. Here an attempt is made to give the equal proportion to each selected sample.

The table No. 2 depicts the usage pattern of college students; the frequency of the usage of SNS. According to the above table 46% of college students spend 4-7 hours per week for using SNS. Quite significant numbers of people (29%) are spending 8-12 hours per week to use SNS. The comparison of this data among the college students of Bangalore and Mysore cities is

quite interesting. In Mysore city 54% of college students spend 4-7 hours on using SNS but in Bangalore city same amount of time is spend by only 38% of students.

Today in India, particularly among the college students Facebook is the favourite social networking website. According to the present study total 58% of the college students in Bangalore Mysore cities are using Facebook. Interestingly, 74.% of students in Bangalore using only Facebook contrary to 42% in Mysore. Hence there is a significant difference in the preference of using particular SNS among college students of Mysore and Bangalore cities. Second preferred SNS is Orkut (27%). In Bangalore only 16% of students use Orkut but in Mysore its usage is 37%

Table-1								
General Profile of the	Respondents							

Region	Level of Student's Education	Ger	Total		
Region	Level of Student's Education	Male	Female	Total	
No. of College Students in Bangalore City	Pre-University Level	63	62	125	
	Degree Level	62	63	125	
No. of College Students in Mysore City	Pre-University Level	63	62	125	
	Degree Level	62	63	125	
	Total	250	250	500	

Table 2

		1	able-2				
	Fre	quency of the Usag	e of Social N	Networking Sites			
How frequently do you use	Time	0	College Students in Bangalore City		College Students in Mysore City		
		Number of Students	%	Number of Students	%	Total No. of Students	Total %
	Less than 1 hour	16	6.5	19	7.6	35	7
	1-3 hours	34	13.5	21	8.4	55	11
SNS (per	4-7 hours	95	38	136	54.4	231	46.2
week)?	8-12 hours	82	32.5	65	26	147	29.4
	More than 12 hours	23	9.5	09	3.6	32	6.4
	Total	250	100	250	100	500	100

Table-3

	Social Naturating Sites	College Students in Bangalore City		College Students in Mysore City		Total No. of	T . 4 . 1. 07
	Social Networking Sites	Number of Students	%	Number of Students	%	Students	Total %
Which SNS	Facebook	187	74.8	105	42	292	58
do you	Orkut	42	16.8	93	37.2	135	27
prefer to use?	Twitter	05	2	12	4.8	17	3.4
	Myspace	00	00	01	0.4	1	0.2
	Others	26	6.4	39	15.6	65	13
	Total	250	100	250	100	500	100

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College students use SNS for many different purposes. It is too difficult to point out one particular purpose of usage. However, as the above table shows total 53% of both Mysore and Bangalore college students use SNS for 'keeping in touch with friends'. Second highest purpose is 'keeping in touch with family' (29%). There is no much difference between the usage pattern, particularly on the purpose of using SNS among college students of Bangalore (50%) and Mysore (55%) cities.

The above table No.5 represents views of the college students on changing nature of interpersonal relationships with their respective members of family. During the field work students were asked 'has the usage of SNS altered the nature of your interpersonal relationships with your family members', for that total 80% of students have agreed and total 19% have denied any changes in their interpersonal relationship with their family members. We can observe here, the intervene of SNS (new technology) has caused for lots of changes in interpersonal relationship with the family. Hence there is a major influence of SNS on the changing college student's interpersonal relationships with their members of family.

Evidently the usage of SNS brought significant changes in student's inter-personal relationship as well as in communication with their members of family. The availability of SNS connectivity increased the communication level between students and their respective members of family, which is shown in the above table. Total 92% of college students in both Mysore and Bangalore cities have agreed that they communicate with their family members more due to the availability of SNS. In this regard there is no much difference between college students of Bangalore and Mysore. Only 8% of college students have responded negatively.

Table-4
College Students' Purpose of Using Social Networking Sites

		College Students in Bangalore City		College Stu in Mysore		Total No.	
What is/are		Number of Students	%	Number of Students	%	of Students	Total %
purpose of	Keeping in touch with family	56	22.4	90	36	146	29.2
using Social Networking	Keeping in touch with friends	127	50.8	137	55.2	265	53
Sites?	To meet new people	13	5.2	07	2.8	20	04
Sites:	Just for fun and entertainment	08	3.2	00	00	08	1.6
	To be 'in' because it's popular nowadays	30	12	10	4	40	08
	Others	16	6.4	05	2	21	4.2
	Total	250	100	250	100	500	100

		1	able-5				
	Changing Inte	erpersonal Relation	onships with	the Members of	Family		
Has the usage of SNS		College Students in Bangalore City		College Students in Mysore City		Total No. of	Total
altered the nature of your interpersonal		Number of Students	%	Number of Students	%	Students	%
relationships with your	Agree	216	86.4	187	74.8	403	80.6
members of family?	Disagree	34	13.6	63	25.2	97	19.4
	Total	250	100	250	100	500	100

Table 5

		_	able-o				
The I	ncreasing Level	of Communication	on with the l	Family due to the	Usage of	SNS	
		College Students in Bangalore City		College Students in Mysore City		Total No. of	Tota
Do you communicate on SNS more with your		Number of Students	%	Number of Students	%	Students	%
family because you have SNS connectivity?	Yes	221	88.4	239	95.6	460	92
Sito connectivity.	No	29	11.6	11	4.4	40	08

100

250

100

500

250

Table 6

Total

100

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The above table No.7 is quite related to the previous issue we are dealing with. Total 81% of college students of both cities have agreed that there have been changes in their relationship with their family members after started using SNS.

In India the usage of SNS among college students is apparently increasing trend. It is very important to know what parents think about their children's usage of SNS. Hence, in the process of collecting data, students were asked 'what is your parent's opinion of you using SNS', for that 55% of the total students expressed that their parents are quite 'OK' with their children's

usage of SNS. But when we look at the responses solely in Mysore city, its only 42% of students said 'OK' and majority (58%) of the parents of Mysore city college students are 'not ok' on their children's usage of SNS.

The above table No.9 shows the changes in interpersonal relationships of college students and their friends. The question 'has the usage of SNS altered the nature of your relationships with your friends', for that 77% of total college students of both cities have agreed and only 22% have disagreed with the above statement.

Table-7
Changes in the relationship with the family after using SNS

Has there been any		College Stud Bangalore		College Stude Mysore C		Total No. of	Total
changes in your relationship with your		Number of Students	%	Number of Students	%	Students	%
family members after	Yes	214	85.6	194	77.6	408	81.6
started using SNS?	No	36	14.4	56	22.4	92	18.4
	Total	250	100	250	100	500	100

 Table-8

 Parent's Opinion on the Usage of SNS by Their Children

		College Students in Bangalore City		College Students in Mysore City		Total No. of	Total
What is your parent's opinion of you using		Number of Students	%	Number of Students	%	Students	%
SNS?	Ok	172	68.8	105	42	277	55.4
	Not Ok	78	31.2	145	58	223	44.6
	Total	250	100	250	100	500	100

T-11- 0

		1	able-9				
	Changir	ng Interpersonal H	Relationship	s with the Friend	S		
Has the usage of SNS altered the nature of your interpersonal		College Students in Bangalore City		College Students in Mysore City		Total No. of	Total
		Number of Students	%	Number of Students	%	Students	%
relationships with your	Agree	205	82	182	72.8	387	77.4
friends?	Disagree	45	18	68	27.2	113	22.6
	Total	250	100	250	100	500	100

 Table-10

 The Level of Communication with the Teachers using SNS

		College Students in Bangalore City		College Students in Mysore City		Total No. of	Total
Do you communicate with your teachers using SNS?		Number of Students	%	Number of Students	%	Students	%
	Yes	68	27.2	46	18.4	114	22.8
	No	182	72.8	204	81.6	386	77.2
	Total	250	100	250	100	500	100

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Currently the college going students do use SNS for interacting with the teachers. This new phenomenon is going up but not too fast. As the above table shows that only 22% of total college students both in Mysore and Bangalore cities use SNS for communicating with the teachers and (77%) majority of them do not use SNS for communicating with their teachers.

To know how much these college students trust people who become friends through online. They were asked 'What according to you is the degree of trustworthiness of the people you meet only on SNS?'. (50%) Majority of the total college students pointed that the people they meet on online are slightly trustworthy. Second highest was ranked to moderately

trustworthy (29%). Hence the degree of their trustworthiness towards the people they meet in online quite low.

The above table No.12 shows that how the preference for SNS to face-to-face relationship is increasing steadily. Total 70% of the college students both in Mysore and Bangalore cities preferred to use SNS than face-to-face interaction due to several reasons.

Even though the college students preferred to have SNS interaction than face-to-face interaction, but they haven't agreed that usage of SNS can be an alternative to face-to-face interaction. 75% of total college students disagreed with the question asked, 'Do you think the usage of SNS can be an alternative to face-to-face interaction?'

		College Students in Bangalore City		College Students in Mysore City		Total No. of	Total
What according to		Number of Students	%	Number of Students	%	Students	%
you is the degree of	Very trustworthy	19	7.6	06	2.4	25	5
trustworthiness	Moderately trustworthy	131	52.4	17	6.8	148	29.6
of the people you meet only	Slightly trustworthy	82	32.8	171	68.4	253	50.6
on SNS?	Not at all trustworthy	18	7.2	56	22.4	74	14.8
	Total	250	100	250	100	500	100

Table-11

Table-12 The Increasing Preference for SNS to Face to Face Relationship

		College Students in Bangalore City		College Students in Mysore City		Total No. of	Total
Do you prefer SNS to face to face relationship?		Number of Students	%	Number of Students	%	Students	%
	Yes	189	75.6	163	65.2	352	70.4
	No	61	24.4	87	34.8	148	29.6
	Total	250	100	250	100	500	100

Table-13 Usage of SNS is not an Alternative to Face-to-Face Interaction **College Students in College Students in Bangalore City Mysore City** Total No. of Total Number of Number of Students % Do you think the usage % % Students Students of SNS can be an 25 Yes 27.2 57 22.8 125 68 alternative to face-toface interaction? 77.2 72.8 193 375 75 No 182 250 100 250 100 500 Total 100

Conclusion

Through the above analysis it is found that the usage of SNS influences interpersonal relationships of college students. It was considered college students' interpersonal relationships only with their members of family, their friends and their teachers. The usage of SNS brought lots of changes in interpersonal relationships between these students and members of family and it also helped students to have more communication with their family members. It is also true with their friends. The majority (58%) of the students use Facebook and only 27 % of students use Orkut, which shows that the Orkut is gradually declining since 2008. 53% of college students in this study use SNS for 'keeping in touch with friends'. The majority of the parents of these students are 'ok' with their children using SNS. The present study provides a major base for analyzing the technological implications on society in the domain of sociology. The present research based study confirms the implications of social networking sites on the interpersonal relationships of college students.

References

- 1. Boase J., Horrigan J.B., Wellman B. and Rainie Lee, The Strength of Internet Ties: The internet and email aid users in maintaining their social networks and provide pathways to help when people face big decisions. Washington, D.C.: Pew Internet and American Life Project (2006)
- Boyd D.M. and Ellison N.B., Social Networking Sites: Definition, history, and scholarship, *Journal of Computer-Mediated Communication*, 13(1) (2007)
- Diani M., Social Movement Networks Virtual and Real, Information, Communication and Society, 3(3), 386-401 (2001)
- 4. Geanina Havarneanu, The Positive Dependence between the Rezolutiv Style and the Creative Level, *Int. Res. J. Social Sci.*, 2(3), 20-24 (2013)
- 5. Goodings L., Locke A. and Brown S., Social Networking Technology: Place and Identity in Mediated Communities, *Journal of Community and Applied Social Psychology*, **17**, 463-476 (**2007**)
- Goodman J., Click First, Ask Questions Later: Understanding Teen Online Behaviour, *Aplis*, 20(2), 84-86 (2007)
- 7. Haveripeth Prakash D., Juvenile Justice A Hard Look, *Int. Res. J. Social Sci.*, 2(1), 38-40 (2013)
- Huang C., A Brief Exploration of the Development of Internet Use for Communication among Undergraduate Students, *Cyberpsychology and Behaviour*, 11(1), 115-117 (2008)

- **9.** Jennifer Jean Quinn, Family Relations: 21st Century Issues and Challenges, Nova Science Publishers, (**2008**)
- Knouse S. and Webb S., Virtual Networking for Women and Minorities, *Career Development International*, 6(4), 226-228 (2001)
- 11. Lenhart A. and Madden M., Social Networking Websites and Teens, Washington, D.C., Pew Internet and American Life Project, (2007)
- 12. Livingstone Sonia, Relationships between Media and Audiences, In Liebes, T. (ed.), Curran, J. (ed.): *Media*, *ritual and identity*. London, New York: Routledge, (1998)
- **13.** Manjunatha S., The Usage of Social Networking Sites Among the College Students in India, *International Research Journal of Social Sciences*, **2(5)**, 15-21 (**2013**)
- 14. Peluchette J. and Karl K., Social Networking Profiles: An Examination of Student Attitudes Regarding Use and Appropriateness of Content, *Cyberpsychology and Behaviour*, **11(1)**, 95-97 (2008)
- **15.** Pettenati M.C. and Cigognini M.E., Social networking theories and tools to support connectivist learning activities, *Journal of web based learning and teaching technologies*, (2007)
- **16.** Preeti Mahajan, Use of Social Networking in a Linguistically and Culturally Rich India, *The International Information and Library Review*, (2009)
- Renuka E. Asagi and Dr S. A. Kazi, Women Desertees: Post-Desertion Problems, *Int. Res. J. Social Sci.*, 2(1), 29-33 (2013)
- Subrahmanyam K. and Lin G., Adolescents on the Net: Internet Use and Well-Being, *Adolescence*, 42(168), 659-677 (2007)
- **19.** Valadez J. and Duran R., Redefining the Digital Divide: Beyond Access to Computers and the Internet, *The High School Journal*, Feb/Mar 2007, 31-44 (**2007**)
- **20.** Valkenburg P.M., Peter J., and Schouten A.P., Friend Networking Sites and Their Relationship to Adolescent's Well-Being and Social Self-Esteem, *Cyber Psychology and Behavior*, **9(5)**, 584-590 (**2006**)
- **21.** Waldstrom C. and Madsen H., Social Relations Among Managers: Old Boys And Young Women's Networks, *Women in Management Review*, **22(2)**, 136-147 (**2007**)
- **22.** Weatherall A. and Ramsay A., New Communication Technologies and Family Life, Families Commission Blue Skies report 5.06, (**2006**)
- William Fielding Ogburn and Meyer Francis Nimkoff, Technology and the Changing Family, Greenwood Press, (1976)