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Comparison of Media and Digital Knowledge among University of Technology Birjand (Iran), Pune in India and University of Liege in Belgium

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Abstract: Media literacy is a kind of skill-based understanding according to which different types of media can be distinguished and the types of media production can be identified and differentiated. Teaching the necessary skills for communicating thoughtfully and consciously with the media and at the same time developing a critical, analytical and accurate perspective towards media messages (written, visual and audio) are the issues that are discussed in "media literacy". A comparison and analysis of digital and media literacy among students of three universities in Iran, Belgium and India made it possible to investigate the issue thoroughly and comparatively and reveal the strengths and weaknesses of media and digital literacy compared to similar students in other countries so that more effective approaches of promoting media and digital literacy can be taken.

Key words: Media literacy, media knowledge, information community, internet, effective

INTRODUCTION

The widespread speed of media is one of the criteria and characteristics related to the emergence of information community which has influenced private lives of people. With the advances in communication and information technology TV services are related to the networks of institutions and widespread organizations and finally with satellites and therefore are ubiquitous in everywhere in the world. However, the coverage of new media from satellite TVs to internet has grown a lot and affected the entire world. Continuous and 24 h access to the media and the issue that in the new media the audience can be both consumer and producer of information have made their learning very widespread and rapid. This 24 h access to media necessitates having media knowledge. Media knowledge concentrates on learning, assessing and applying media and is considered perception relying on skill and we can discriminate variety of media on the basis of that and differentiate many media productions (Younes, 2007). Since, then media knowledge was come to fore and as a consequence concerns about unpleasant effects of some media programs developed, Marshal McLuhan used for the first time the term media knowledge (Jahromi and Jahromi, 2006), although, according to internet base center John Kakin and SJ invented media knowledge (Taqizadeh and Afkhami, 2013).

According to Elizabeth Thoman, media knowledge includes three continuous steps that lead to its capability: the first step: importance of individual planning about how to use media (media consume diet) in a sense that the viewer pays more attention to selection and watching different programs and watches TV, video, electronic games, movies and other media with preplanning and reduces consume level (time). The second step: this step includes learning special skills of critical watching, learning with the aim of analysis and asking this question that how this frame has built and what other things have been deleted. Skills of critical watching are the best scientific search for group activities in teaching media knowledge about creation of media messages. The third step: in this step, the viewer pays attention to the invisible aspects of media and considers these questions like who hears the media messages? What is the purpose of sending message? Who takes the advantage of sending message and who receives the disadvantage? And ….what is important in this step is knowing the facts and aspects of message which have been deleted. On the other hand, understanding the text by the addressee is related to detecting knowable dimensions of message.

According to UNESCO media knowledge has important role in developing democratic culture and active civil community (UNESCO-UNEP, 1976) and as a capacity allows people to interact effectively with the media and develop critical thinking, life time learning skills for social life and becoming an active citizen (Wilson, 2012).

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Boles expresses media knowledge brings about challenge for message and the addresses transforms from the mood of potentiality into an active mood (asker and self-expressing). Therefore, media knowledge is a special capability that transforms the reader of any text (written, visionary, auditory, kinds of books, magazine, billboard, radio, TV and satellite) from potentiality into an active one required by human societies. In fact media knowledge is a necessary skill that helps the human being to think autonomously and has a thorough and all-dimensional image of the media and allows the addresses with thorough knowing, process the media messages and attain the existent knowledge in every media (Mahnaz and Mahnaz, 2012).

Potter (1998) indicated in his studies that if people have high level of media knowledge as soon as media define a meaning of life for them gradually their treat, feeling and attitudes do not change and people can gradually eliminate these definitions of media from the around world and replace the media program with their own ideas.

The results of a study indicated that the male students have more access to the media and use them more than female students. Also there is meaningful relation between usage level of interactive media and access and use of media and socio-economic basis but this relation was not meaningful with usage of written media (newspaper and magazine). Also De La Piscina *et al.* (2011) in a study came to this result that education system has not prioriated media knowledge among its curriculum and recruiting young teachers has affected more digital skills of the students.

Although, media knowledge has many upshots but the share of media knowledge in Iran is very low and this causes concern as we live in a media milieu and we should know all the functional information of the society. We should do research continuously in order to understand the false ideas about society and media. Therefore, the students should continuously improve their media knowledge in order to not have a superficial perception of messages and in fact the aim is increasing our knowledge about interpretations. All the media messages are interpretable and students and young people think that they know many things because they spend much time in media channels and special effects of images. Unfortunately, students and young people are unaware of preliminary perception of media industry. Few of them can interpret interests or economic nature of the media. Few of them know that media affects their attitude and shapes it.

Importance of media knowledge increases gradually as David Buckingham believes that in the modern world this media knowledge is as valuable as knowledge of traditional reading and writing. Therefore, it can be said that media knowledge is a part of general knowledge. Therefore, this study was performed with the aim of comparison of media knowledge among the Iranian, Indian and Belgian students.

MATERIALS AND METHODS

This descriptive analytical study was performed on 100 students of Industrial University of Birjand (as Iranian case study), 100 professional students of Pune University in India (as Indian case study) and 100 students of Liege University in Belgium (as Belgian case study) having bachelor's degree with random and systematic sampling data gathering tool for the prepared questionnaire was comprised of two parts. The first part was related to demographic traits and the second part was related to media knowledge of the students. Media knowledge questionnaire was prepared using valid resources in the realm of media knowledge includes 76 species and 6 scales as following: attitude to technology (16 species), familiarity with media equipment (20 species), using media equipment (8 species), skill in using internet for communication (16 species) and reaction to media message (6 species) and skill with using cell phone (10 species). Questions related to attitude to media (cell phone, internet, laptop, computer) using media equipment and skill with using internet for communication were rated based on Likert five-scale leveling the answering to the questions was considered, respectively as never = 1 to very high = 5, never = 1 to always = 5 and unskilled = 1 to high skill = 5. Questions related to reaction to the media message (including radio, TV, newspaper, internet and satellite) were considered as sending message, phone call, sending email to TV channel, visiting a web site, turning off and .... questions of familiarity with media equipment were scored as no = 0 and yes = 1 and the questions of skill in using cell phone were rated based on Likert seven-scale leveling as lack of skills = 0 to total skills = 6. For detecting validity, questionnaire was given to 5 experienced experts and professional in this field and after desired corrections the validity was confirmed. For detecting consistency we used Test-Retest Method as at first the questionnaire was implemented preliminary on 20 students and after 1 week the questionnaire was implemented and correlational quotient between two stages was obtained respectively, 0.72, 0.74, 0.76, 0.79, 0.82 and 0.74. Data entered into statistical Software SPSS15 and were analyzed using statistical Chi-square Method and one-way variance analysis in meaningful level of 0.05.

RESULTS AND DISCUSSION

In this study 100 students from Iran, India and Belgium (totally 300 students) were studied. Among the Iranian students 72%, Indian students 65% and Belgium students 53% were male and the rest were female ($p = 0.02$) (Table 1). According to results of the one-way variance analysis the average score of media knowledge was meaningfully different in at least two groups of students ($p<0.001$). The results of Tukey range sequence test indicated that the average score of attitude to technology and using media equipment among Belgium and Indian students in relation to the Iranian students was meaningfully higher ($p<0.05$) and score average of familiarity with media equipment, skill with using internet for communication and skill with using cell phone among Belgium students in relation to Iranian and Indian students and Iranian students in relation to Indian students was meaningfully higher ($p<0.001$) (Table 2). The results of one-way variance analysis indicated that average score of skill with using cell phone at least in 2 groups of students was meaningfully different ($p<0.001$). According to the results of Tukey range sequence test average score of skill with sending a message with written text, changing ringing tone of cell phone, using calculator/setting alarm, internal setting of an image, written language and …saving new contact in cell phone entering password and receiving Iran cell charge or valid line among Indian students was meaningfully lower in comparison with Iranian and Belgium students. Also average score of skill with locking phone line, sending image and video through Viber and Line software and visionary chat among Belgium students in relation to Iranian and Indian students and average score of paying bills and controlling account among Belgium students was meaningfully higher ($p<0.001$) (Table 3).

The results of the study indicated that after receiving a TV message, Iranian students reacted with sending a message, sending an email to program or TV channel and visiting website, Belgium students reacted with phone call and turning off the TV and Indian students reacted with sending a message through posting to program or TV channel and the kind of reaction to the TV messages is different among the students of different countries ($p<0.05$). According to the results of a study, it can be said that Belgium students don't react to the messages form media like radio, newspaper and satellite except internet messages and the way of responding to messages of most media is different among the students of the studied countries (Table 4).

The results of this study indicated that average score of attitude to technology and using media equipment among Belgium and Indian students was meaningfully high in relation to Iranian students ($p<0.05$) and score

Table 1: Comparison of gender frequency distribution among students

	Number (%)			
Gender	Iranian	Indian	Belgian	p-value
Male	72 (72)	65 (65)	53 (53.5)	0.02
Female	28 (28)	35 (35)	46 (46.5)	-

Table 2: Comparison of score average of media knowledge scales among students

	Average±SD			
Scales	Iranian	Indian	Belgian	p-values
Feel of belongings to technology	30.82±5.640	35.67±6.430	34.58±4.08	<0.001
Familiarity with media equipment	12.28±6.250	4.68±6.060	15.67±1.85	<0.001
Using media equipment	25.59±3.660	31.10±4.860	32.30±2.47	<0.001
Skill of using internet in communications	64.30±10.53	58.93±12.36	72.88±4.32	<0.001
Skill in using cell phone	56.13±5.970	52.26±10.38	59.72±1.72	<0.001

Table 3: Comparison of average score of skills related to cell phone usage among students

	Average±SD			
Skills	Iranian	Indian	Belgian	p-values
Sending written message	5.91±0.57	5.53±1.16	5.96±0.20	<0.001
Changing cell phone ringing tone	5.88±0.69	5.35±1.44	5.97±0.30	<0.001
Using calculator/alarm	5.87±0.59	5.39±1.37	5.96±0.28	<0.001
Internal settings, images, written language, etc	5.84±0.72	5.32±1.37	6±0	<0.001
Saving a new call number in cell phone	5.96±0.40	5.38±1.41	6±0	<0.001
Locking SIM card	5.42±1.30	5.21±1.45	5.97±0.30	<0.001
Entering password of Irancell credit or credit line	5.67±0.99	5.10±1.55	5.98±0.20	<0.001
Paying bills and checking account	5.58±1.03	4.88±1.53	5.96±0.40	<0.001
Sending image and video through viber and line software and etc	5.07±1.54	5.14±1.54	5.98±0.20	<0.001
Visionary chat	4.93±1.63	4.96±1.58	5.94±0.45	<0.001

Table 4: Comparison of partial frequency of reaction to a media message among students

Scales	Groups	TV	Radio	Newspaper	Internet site	Satellite
Sending a message	Iranian	67	9	15	24	7
	Indian	35	2	13	17	1
	Belgian	1	0	0	0	0
p-value related to χ^2-test		<0.001	0.002	<0.001	<0.001	0.004
A call	Iranian	26	7	12	18	3
	Indian	25	10	9	10	5
	Belgian	87	0	0	11	0
p-value related to χ^2-test		<0.001	0.007	0.003	0.19	0.09
Sending email to a TV	Iranian	23	0	5	25	5
program or channel	Indian	17	6	12	18	0
	Belgian	3	0	0	97	0
p-value related to χ^2-test		0.29	0.002	0.001	<0.001	0.006
Visiting a web site	Iranian	38	4	19	49	10
	Indian	19	5	24	30	0
	Belgian	7	1	10	82	0
p-value related to χ^2-test		>0.001	0.26	0.03	<0.001	>0.001
Turning off	Iranian	49	22	9	16	16
	Indian	22	12	11	15	5
	Belgian	99	0	0	1	0
p-value related to χ^2-test		<0.001	<0.001	0.004	0.001	>0.001
Sending a program through post to	Iranian	15	2	4	16	1
TV program or channel	Indian	24	4	8	10	3
	Belgian	4	0	0	96	0
p-value related to χ^2-test		<0.001	0.13	0.02	<0.001	0.17

average of familiarity with media equipment, skill with using internet for communication and skill with using cell phone among Belgium students in relation to Iranian and Indian students and Iranian students in relation to Indian students was meaningfully higher ($p<0.001$).

Also results indicated that average score of skill with sending a message with written text, changing ringing tone of cell phone, using calculator/setting alarm, internal setting of an image, written language and …saving new contact in cell phone, entering password and receiving Iran cell charge or valid line among Indian students was meaningfully lower in comparison with Iranian and Belgium students and average score of skill with locking phone line, sending image and video through Viber and Line software and visionary chat and average score of paying bills and controlling account among Belgium students was meaningfully higher in relation to Iranian and Belgium students and was meaningfully higher in Iranian students compared with Indian students ($p<0.001$).

According to these results, it can be said that in the contemporary world abundant with mass media in people's lives with direct and indirect messages of different media, a world in which media life has been entangled with business rules and the addressee does not accept any advice from family, school, political or religious institution about appropriate media, having analytical capability for finding considered media has been prioritized in writing and reading learning.

Media like a recognition device act as an eye for the addressee to see the real world and she/he is alone to choose among million messages and senders. In this case, the addressee needs to be equipped with media knowledge tool in order to reach an appropriate choice.

The results of a study by Babran indicated that media like TV, radio, internet, satellite, newspaper and magazine and etc increasingly supply people in society with different information, amusements and ads and play an important role in shaping and affecting culture, value, norm, belief and attitude. In the contemporary age, preserving thinking autonomy, avoiding potentiality, using critical thinking, increasing choice capability and facing with this complex process is attainable through developing media knowledge for sustainable information network rooted in all cultural milieu of human being. In this case the results of a study by Nasiri indicated that media knowledge is a way that helps us to think independently and have a thorough image of media, gain the extant knowledge in every media in any case media knowledge is considered necessary that can compensate mass media influences and allow the addressees to process the media messages with thorough knowledge.

The contemporary world is abundant with media messages whether perceived or not, come to us through releasing by mass media and an important and challenging point is how to make progress simultaneously and preserving relationship with information and it is required that people in this society nowadays be critical thinkers, effective communicators and active citizens.

Oskoei in a study compared media knowledge of students engineering college with Social Studies College in Tehran University and the results indicated that there are meaningful differences between students of engineering college and Social Studies College from the viewpoint of access, using media and producing and processing information while there was no meaningful

difference from the viewpoint of how to select a program, student's attitude to media and having critical thinking about media. Also, the results of a study by Soleiman with the aim of assessing media knowledge of college students and school students in Tehran indicated that they cannot choose aware from different senders, act independently and control their consume level and require teaching because the lack of media knowledge in order to be equipped with analytical and assessment media productions. Also, the school students consider media knowledge and understanding it as the same as traditional knowledge development and college students consider, it as something that helps a person to perceive how to use the media and meaningfulness. Also, the results indicated that while school students know that learning the aim of media knowledge is related to understanding the situations in media, the attitude of college students has been expressed as independently critical, function assessment, choosing ability and attaining the forthcoming situation.

CONCLUSION

Although, there is a wide gap in the realm of media knowledge between people in different countries, this issue indicates the necessity of examining media knowledge more than before. Because of the importance of media knowledge improving in society, governments should prioritized media knowledge learning by citizens and bring about new solutions in this realm. As, it tries to combat with media illiteracy, it should start media knowledge teaching from schools and universities as one of the main aims of media knowledge is make aware and reduce negative effects of media on teens and kids and as teaching media knowledge should start from schools and universities for obtaining the situation of their media knowledge, performing scientific research is needed and it is not possible to plan for media knowledge teaching on the basis of achievements out of school and college student's community or abroad research results with differ with Iran culturally, economically and technologically.

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