The UseMotif, Social Media Classification and Subjective Wellbeing on College Students of Social Media Users

¹DwiNastiti, ²Effy Wardati Maryam, ³VichaAisyah

Abstract--The problem in this research is motive for using social media, social media classification used, and subjective wellbeing (SWB)college students of social media users. This research is quantitative descriptive. The study population was students of the psychology faculty of Muhammadiyah University of Sidoarjo with a sample of 205 students. Retrieval of the data by using a psychological scale for SWB, and closed questionnaire for motives for using social media and social media classification used. Data analysis using descriptive statistical analysis. The results showed most social media students (65.4%) have moderate SWB, small proportion (20%) have low SWB, and have high SWB (14.6%). The motive for using social media is mostly to find news about an event (55%), motif of high SWB student is for learning purposes, on moderate SWB is to satisfy curiosity, on low SWB get a sense of peace to get knowledge. The types of social media that are used mostly (72%) to content community classifications(Youtube), and social networking site (Line) on high and low SWB, blogs (Yahoo) on moderate SWB.

Key words--Use Motif, Social Media Classification,Subjective Wellbeing,CollegeStudents of Social Media Users

I. INTRODUCTION

The use of social media is growing, not only as a medium of ordinary communication, but as a medium that can fulfill many human needs, for example make a relationships, friend network, give a social support, to using social media in emergency situation (Burke M, et al., 2010; Best P, et al., 2014; Yin J, et al., 2012). The social media available today is very diverse, such as *Facebook, Twitter, Instagram, Youtube, Line, Whatsapp, Yahoo, Snapchat,* and many more.KaplanandHaenlein (2010), Social media classification including *Collaborative blogs or collaborative projects* (such as: wikipedia), *Blogs and microblogs* (such as: yahoo), *Content communities* (such as: youtube), *Social networking site* (such as: facebook), and *Virtual game world*.Based on statistical data, social media users in Indonesia in 2017 reached 96 million users, and the active users of social media are students and students. Previous data show that 80% social media users are the younger generation in the age range of 20-24 years and 25-29 years (cnnindonesia, 2016).

Social media has a major influence in today's life. People are more preoccupied with their gadgets or smartphones than having to interact with the other person or build relationships with the environment related to meeting their needs. There are many benefits gained by using social media turned out to have both positive and

¹Psychology Study Program Faculty of Psychology, Muhammadiyah University of Sidoarjo, Indonesia, Jl. Majapahit, 666 B, Sidoarjo, dwinastiti@umsida.ac.id

² Psychology Study Program Faculty of Psychology, Muhammadiyah University of Sidoarjo, Indonesia, Jl. Majapahit, 666 B, Sidoarjo, effywardati@umsida.ac.id

³Psychology Study Program Faculty of Psychology Muhammadiyah University of Sidoarjo, Indonesia, Jl. Majapahit, 666 B, Sidoarjo

negative effects. The positive impacts include being able to increase self-confidence, increase life satisfaction (Ellison, B.N., et al., 2007), or vice versa can reduce self-esteem and happiness (Valkenburg, P.M, et al, 2006).

Among student, most of them do not want to be away from smartphones to check their social media activities (Ellison, B.N., et al., 2007). Social media is used for fulfilling information needs, for dating, or for entertainment (Melati, 2015; Ghifari M, et al, 2017; Ferdian R.A, 2017).Survey Results (Kompas.com) on Indonesian Youth Internet Usage, shows that there are three motivations for children and adolescents to access the internet, namely to find information, to connect with friends (old and new) and for entertainment. Information search is often driven by school assignments, while the use of social media and entertainment content is driven by personal needs (Panji, 2014).McQuail, Blumler, and Brown (2010) suggested that someone's motives for using social media are:(1) Information Motives (include: a. Search for news about events and conditions relating to the nearest environment, community, and the world;b. Seek guidance on various practical problems, opinions, and matters relating to the choice;c. Satisfying curiosity and general interest; d. Learning, education; e. Gaining a sense of peace through the addition of knowledge);(2) Motives for Personal Identity (including: a. Finding personal values;b. Finding a behavior model; c. Identify yourself with other values in the media; d. Increase understanding about himself);(3) Integration Motives and Social Interaction (includes: a. Acquiring knowledge about the circumstances of others;b. Identify yourself with others and increase ownership; c. Find conversation material and social interaction; d.Gaining friends other than humans; e. Helping to carry out social roles; f. Allow yourself to be able to contact relatives, friends, and the community);(4) Entertainment Motives (including: a. Escape from problems; b. Relax; c. Gaining soul and aesthetic pleasure; d. Charge time; e. Emotional channeling; f. Generating sex drive). Hersinta, et al (2010)stated that most of the initial research was about online communities, assuming that individuals use social networking sites to connect with other people outside the social group and the location where they are with similar interests and share geographical locations. Internet progress makes lifestyle changes experienced by many individuals including students. Lifestyle changes require students to use social media so that more types of social media are used by students.

Researchers conducted an initial survey of 24 students of social media users, and the results show that 19 students use social media to eliminate boredom, 2 students use social media because of loneliness, and 3 people use social media to relieve stress. Individuals who often feel bored, lonely, and stressed are indication of individu that have subjective wellbeing in the affective component with dimensions of negative affect, so that it can be categorized as low subjective wellbeing group (Putri, 2013). Subjective well being (SWB) is a person's cognitive and emotional evaluation of life including happiness, peace and satisfaction with life (Diener, Oishi& Lucas, 2003). This difference in evaluation results in differences in the level of SWB in each individual. Putri (2013) classifies subjective well-being group categorized as individuals who have high positive affect, high life satisfaction and moderate negative affect. The moderate well being group categorized with individuals who have high positive affect, moderate life satisfaction., and low well being groups are categorized as individuals who have high negative affect, moderate positive affect and moderate life satisfaction.

Based on the positive and negative impacts of social media use, and several studies discuss separately, the researchers consider it important to reveal more broadly. Researchers will conduct research that aims to determine the level of subjective well being students of social media users, motives for using social media, as well as social media classifications used are associated with their subjective well being level. It is hoped that the results of this study can be applied to utilize social media to improve the subjective wellbeing of students.

II. RESEARCH METHODS

This research is descriptive quantitative research. The variables in this study are subjective well being, motives for using social media, and classification of types of social media. The population in this study were 583 students of the Psychology Faculty of the University of MuhammadiyahSidoarjo. The number of students sampled is 221 subjects based on Issac and Michael tables with a 5% error rate, and taken using accidental sampling technique. This study uses a psychological scale to collect data on subjective well beingvariables, and 2 closed questionnaires to collect data on motives for using social media, and classifications of social media types. Preparation of a subjective well being scale using a Likert scale model. The analysis technique in this study uses descriptive statistical analysis techniques. The results of the calculation of subjective well being variables will be categorized as high, medium and low categorization as table 1 below:

categorization	Norm
Low	X<(Mean – (1SD))
Moderate	\leq X < (Mean + (1SD))
High	$X \ge (Mean + (1SD))$

Table 1. Well Being Subjective Score Category

In the motive variable of social media use, and social media type classification, the statistical calculation used is $P = f/n \ge 100\%$

This percentage description is processed by frequency divided by the number of respondents multiplied by 100%, anddata interpretation uses two numbers behind the comma (Sudjana, 2001), as follows:

percentage	information
0,00%	None
0,01% - 24,99%	A small part
25% - 49,99%	Almost half
50%	Half
50,01% - 74,99%	Most of
75% - 99,99%	In general
100%	All of it

Table 2. Interpretation of Data

III. RESEARCH RESULTS AND DISCUSSION

There are 3 findings obtained from this study, namely:

1. Subjective Well Being Level of students who use social media

The results obtained by researchers regarding the subjective well being scale appear on the subjective well being picture as below:



Figure 1. Subjective Well Being Level Diagram of social media user students

The picture above shows that most (65.4%) students of the Faculty of Psychology, Muhammadiyah University of Sidoarjobelonging to the group of subjects who have moderate Subjective Well Being (SWB), the rest have low subjective well being (20%) and high subjective well being (14,60%). Students who have moderate SWB are students who have pleasant emotionssuch as happy, grateful, and joy even though sometimes feel unpleasant emotions such as failure and despair, and not yet satisfied with their lives.

In general, when someone is in an unpleasant emotional state or is not satisfied with his life, what is done is an attempt to find something that can bring pleasure and satisfaction, so they can feel happiness. At times human feeling bored, lonely or stressed, human behavior can be said to be disturbed (no psychological homestasis is reached) (Nastiti, 2013). In the field of psychology, the process of homeostasis is a process in the self that aims to obtain balance. This can occur if the body experiences stress so that the body will naturally perform a self defense mechanism to maintain a balanced condition. According to Freud, imbalances in humans can cause neurosis, and human tends to avoid uncomfortable situations and always use the pleasure principle (Suryabrata, 2012). This condition causes the ego to find ways to make the psychological condition back in balance. When students feel bored, lonely or stress, social media becomes the choice to eliminate the boredom, loneliness, and stress.

2. Motives for Social Media Use

The results of research that reveal the motives of using social media will be explained based on the grouping of McQuail, Blumler, and Brown (2010), namely:

a. Information motives

Social Media Information Motive	∑/%o	Subjective Well Being		ng
		High	Moderate	Low
Search for news about events and	113 (55%)	19	70	24
conditions related to the nearest				
environment, society, and the world.				
Seek guidance on various practical	57 (27,8%)	12	37	8
problems, opinions, and matters				
relating to the choice.				
Satisfying curiosity and general	61 (29,7%)	7	44	10
interest.				
Learning, self-education .	54 (26,3%)	14	29	11
Gaining a sense of peace through the	47 (22,9%)	4	30	13
addition of knowledge.				

Table 3. Social Media User Information Motives

The table above shows that most (55%) of the motives of students using social media arelooking for news about events and conditions related to the nearest environment, society and the world. In students with high SWB news search is associated with the aim of learning, whereas for students with SWB being more dominated by goals to satisfy curiosity and general interest, and for students with low SWB news search is associated with the need to feel peaceful because their knowledge increases.

A person's needs cannot be separated from information needs about everything, including events that can fulfill information needs, while enriching knowledgetoo. This is the reason why students use social media. The more a person's life increases, the more the need for information will increase, which can now be fulfilled without limitation of time and space. Information needs arise due to the knowledge gap that exists in a person with the information needs that are needed (Meho, 2003).

b. Personal Identity Motives

Table 4. Motives of Social Media Users' Personal Identities

Social	Media	User's	∑/%o	Subjective Well Being		
Persona	al Identity	Motive		High	Moderate	Low

Finding support for	48	8	32	8
personal values.	(23,4%)			
Find a behavior model.	27 (13%)	6	16	5
Identify yourself with other	68 (33%)	8	51	9
values in the media.				
Increase understanding	90	12	55	23
about yourself.	(43,9%)			

Based on the description of the table above, researchers found that almost half of students who use social media have a motive to increase their understanding of themselves. This motif is more often used by students with moderate SWB, as well as students with high and low SWB even though only a small percentage.

The requirement to upload articles as a lecture assignment can help students know how much they can write, for the purpose of learning or to demonstrate the knowledge he has to others. Social media can help writing skills, the ability to express opinions, or express one's abilities (Hayrani, 2015).

c. Integration and Social InteractionMotives

 Table 5. Integration Motives and Social Interaction of Social Media Users

Integration Motives and Social	∑/%o	Subjec	tive Well Bei	ng
Interaction of Social Media Users		High	Moderate	Low
Acquire knowledge about other	65 (31,7%)	6	43	16
people's circumstances.				
Identify yourself with others and	35 (17%)	3	25	7
increase ownership.				
Find conversation material and	52 (25,3%)	8	35	9
social interaction.				
Get other friends than humans.	14 (6,8%)	3	9	2
Helping to carry out social roles.	51 (24,8%)	9	34	6
Allow someone to be able to	96 (46,8%)	14	66	16
contact relatives, friends, and the				
community.				

The table above illustrates that almost half of students use social media with a motive so that they can know the situation of others, contacting relatives, friends and community, and just interacting (communicating) as a motive for using social media, especially for students with moderate SWB. For students with high SWB, only a few use this motif as a reason for using social media, only to carry out its social role. Students with low SWB are mostly dominated to identify themselves with others and increase closeness or intimacy.

This motive is a basic human motive as a social human being. According to Maslow, social needs are one of the 5 human needs as illustrated in the pyramid of needs. Humans as social beings, make it dependent on one another. This need is a lot of encouraging people to take various actions that allow them to always relate to their

groups, play its social role, and form familiarity with others (Santoso, 2010). This can underlie students to use social media to fulfill their needs to be able to connect with other people, or carry out their social roles.

d. Entertainment Motif

Entertainment Motifof	∑/%o	Subjective Well Being			
Social Media Users		High	Moderate	Low	
Break away from problems.	62 (30,2%)	13	35	14	
Relax	100(48,7%)	15	65	20	
Gainingsoulandaesthetic pleasure.	32 (15,6%)	5	22	5	
Pass the time	82 (40%)	10	51	23	
Emotional channeling.	39 (19%)	8	25	6	
Awaken sex drive.	7 (3,4%)	1	5	1	

Table 6. Entertainment Motifof Social Media Users

The table above explains that almost half of students use social media with a motive to relax, fill time, and get rid of problems. Furthermore, it appears that few students with high SWB use entertainment motives as reasons for using social media, even if it uses it tends to break away from problems and channel emotions. Students with SWB are likely to use social media to getenjoyment of soul and aesthetics, and arouse sexual desire. For students with low SWB, only a small percentage use social media to fill their time.

Most of the Psychology Faculty students who have moderate SWB are using social media with a motive to relax, fill time, and get rid of problems. This finding is in accordance with the findings of Pussung (2018), that the biggest motive of Surabaya teenagers using Instagram social media is the motive of entertainment (entertainment), after that followed by relaxation motives (removing fatigue) and knowledge about other motives (knowledge of others). This can happen because the use of social media is done with the aim of eliminating boredom, loneliness, and stress. The features offered by social media are increasingly varied, one of which is an entertaining feature. Humans, including students, tend to avoid uncomfortable situations and always use the pleasure principle (Suryabrata, 2012).

3. Classification of Social Media Types

The use of this type of social media tends to be related to one's SWB level.Subjective Well Being connotes the happiness that a person feels, which is reflected in the satisfaction a person gets in his life. Thus what media will be used relates to whether the selected media can provide satisfaction in accordance with the features offered.

The results and discussion of the classification of types of social media used will use classification of social media as presented by Kaplan and Haenlein (2010) as follows:

a. Colaborative Blogs

Collaborative	∑Subjek/	Subjective Well Being			
Blogs	%	High Moderate		Low	
Wikipedia.	123(60)	17	84	22	
Etc.(Pinterest)	82(40%)	12	53	17	

 Table 7.
 Collaborative Blogs

Based on the data above, researchers found the fact that most students using social media use Wikipedia in this classification, especially students with moderate SWB. While students with high and low SWB use Pinterest.

Collaborative blogs or group blogs. A type of weblog in which posts are written and published by more than one author, joint or partnership working - covers a variety of ways that two or more organisations can work together. Wikipedia is a form of collaborative in the form of an online encyclopedia that contains information from various sources, so there are many points of view in discussing information. In the learning process and in everyday life students are trained to use a basis of thinking that is supported by evidence causing them to useWikipedia as an alternative to find sources that underlie understanding something.Pinterest is a virtual pinboard where someone can upload photos or images that can be included in categories(sort of album or folder) that can be customized by name.Such as the category of 'food and drink' which contains photos and pictures of food and drinks.

b. Blogsdan Microblogs

Blogs dan	∑Subjek/%	Subjective Well Being			
Microblogs		High	Moderate	Low	
Blogger.com.	57 (27,8%)	9	36	12	
Wordpress.c	58 (28,2%)	11	31	16	
om.					
Yahoo!group	25 (12%)	2	20	3	
s.com.					
Lain-lain	65 (31,7%)	10	45	10	
(gmail.com)					

Tabel 8.Blogs dan Microblogs

The table above shows the fact that almost half of students use social media such as gmail, wordpress, or blogger.com., but the yahoo.com type is generally used by students with moderate SWB.Students with high and low SWB tend to use wordpress.com media.

Microblogging is a combination of *blogging* and *instant messaging* that allows users to create short messages to be posted and shared with an audience online. The use of media in this classification seems more to the perceptions and needs of users about the strengths and weaknesses of each media blog.Perceptions and needs are the basis of the reasons for actions taken by humans (Slameto, 2010).Yahoo is known as the second largest

search directory on the web after google. With this ability, it is normal for Yahoo to be often used by students. For students with high SWB, using wordpress can solve social media user problems easily, only by Googling, various solutions can be found, in addition to 27 other advantages.

c. ContentComunities

Content Comunities	∑Subjek/	Subjective Well Being		
	%	High	Moderate	Low
Youtube.	148 (72%)	24	93	31
Flickr.	1 (0,4%)	0	1	0
Slideshare.	17 (8,2%)	2	11	4
Lain-lain.(Pinterest, Vlive)	39 (19%)	8	25	6

Tabel 9. Content Comunities

The data in the table above shows that most of the media used in this classification are media in video form likeyoutube, plus pinterest or vlive, especially for students with moderate SWB. Another trend shows that students with low SWB tend to use youtube plus slideshare; students with high SWB tend to prefer media such as Pinterest or Vlive.

Content communities or community content is an application that aims to share with someone both long and near, like sharing videos, ebooks, images, etc.Popularcontent communities include YouTube, Flickr, and SlideShare. YouTube is a video sharing website, which allows users to upload, watch and share videos.VLive is a South Korean live video streaming service that allows Korean-based celebrities to broadcast live videos on the internet and live chat with fans from around the globe.Slideshare is the largest website sharing online presentation slides in the world, is also one of the easiest ways to improve one's ability to make slide presentations that are better and more interesting.Pinterest is a virtual pinboard, where someone can upload photos or images that can be entered into categories, such as the category of 'food and drink' which contains photos and pictures of food and drinks.

d. Social Networking Site

Social	∑/%o	Subjective Well Being			
Networking Site		High	Moderate	Low	
Facebook.	49 (23,9%)	6	32	11	
Twitter.	20 (9,7%)	3	12	2	
Instagram.	109 (53%)	18	72	19	
LinkedIn.	4 (1,9%)	1	3	0	
Whatsapp.	129 (62,9%)	18	87	24	
Line.	47 (22,9%)	5	29	13	
Snapchat	7 (3,4%)	3	3	1	
Others	13 (6,3%)	1	10	2	

Tabel 10. Social Networking Site

The data in the table above shows that overall, social media which is mostly used in the Social Networking Site group is Whatsapp.When viewed in more detail, students with low SWB use almost half of Whatsapp. and Line; students with high SWB tend to use Whatsapp. andInstagram; students with moderatSWB are likely to choose almost all types of Social Networking Sites.

The difference is: Whatsapp / Line is more used to chat(one of the facilities for communicating between fellow internet users using social media), whereas with Facebook./Twitter/Instagram users can see other people's activities that are famous.LinkedIn is a social network that has a unique concept, where most of its users are professionals who have a business background. Like an identity, LinkedIn is often used as a medium to introduce yourself or business to prospective colleagues or companies with diverse goals.WhileSnapchat is a photo messaging application where users can take photos, record videos, add text and painting, and send it to the list of user-defined recipients.

e. Virtual Game World

Virtual Game	∑Subjek/	Subjective Well Being			
World	%	High	Moderate	Low	
Mobile Legend	82 (40%)	8	58	16	
Others (Wattpad,	123 (60%)	22	76	25	
Webtoon, Vlive)					

Tabel 11. Virtual Game World

In this classification, the types of media used mostly are Wattpad, Webtoon, Vlive.Wattpad is preferred by students with high SWB,Mobile Legend is preferred by students with moderate SWB, and students who have low SWB tend to choose both.

Mobile Legends is a MOBA genre game (Massive Online Battle Arena) which is played in teams with 5 vs 5 gameplay.Wattpad is an online community for writers and readers. Its function is not much different from

blogger.One can create a free account to start writing on Wattpad or just read posts - posts on Wattpad, whether it's short stories, serial stories, articles or poetry.Webtoon is also known as online comics.Much of the information obtained from this study is due to variations in the results compared to previous studies

Much information is obtained from this study because there are variations in the results compared to previous studies that chose to focus on one form of social media (Facebook on Ellison, 2007; micro-blogging on Kaplan, 2010; snapchat on pradita, 2017; writing skills at Hayrani, 2015). The author considers, this research still has weaknesses in the variation of research subjects which was limited to students of psychology faculty of Muhammadiyah University of Sidoarjo, needed to be done correlational or comparative quantitative research.

IV. CONCLUSION

This study shows that most (65.40%) students have moderate subjective well being levels, the rest is 20% has a low SWB level and 14.60% has a high SWB. SWB level has indications related to student motives using social media, where most of it is to search for news about events and conditions related to the nearest environment, society, and the world(55%). Students with high SWB search news for learning purposes, while students with moderate SWB search news to satisfy curiosity, and students with low SWB search for news to get a sense of peace in gaining knowledge. In addition, the level of SWB owned by students also determines the type of media. Used where most (72%) chose to use content community (Youtube) social media classification. and social networking site (Line) on high and low, and students with swb are also using blogs (Yahoo). These results will be considered for conducting a larger and varied type of research on the subject.

REFERENCES

- 1. Best P., Roger M., and Brian T., 2014. Online communication, social media and adolescent wellbeing: A systematic narrative review. *Children ang Youth Services Review*. Volume 41, juni 2014, page 27-36. Online. https://doi.org/10.1016/j.childyouth.2014.03.001Get rights and content
- Burke, M., Cameron M., and Thomas L., 2010. Social network activity and social well-being. *Proceedings* of the SIGCHI Conference on Human Factors in Computing SystemsPages 1909-1912. New York USA. Online. https://www.liebertpub.com/doi/abs/10.1089/cpb.2006.9.584
- P.Nandhini, G.Vijayasharathy, N.S. Kokila, S. Kousalya, T. Kousika. "An Improved Approach of DWT and ANC Algorithm for Removal of ECG Artifacts." International Journal of Communication and Computer Technologies 4 (2016), 82-87. doi:10.31838/ijccts/04.02.05
- 4. Ellison, N.B., Charles S., and Cliff L., 2007. *The Benefits of Facebook "Friends:" Social Capital and College Students' Use of Online Social Network Sites*. Online. https://doi.org/10.1111/j.1083-6101.2007.00367.x
- 5. Ferdian Rio Andre, 2017. Student Motives in Using Social Media as a Datting Event (Study in Students in Malang).*Skripsi*. Communication Science Faculty of Social and Political Sciences University of MuhammadiyahMalang.Online.
- 6. Parijat Pandey, MandeepDahiya (2016) A Brief Review On Inorganic Nanoparticles. Journal of Critical Reviews, 3 (3), 18-26.
- 7. Ghifari, M., et.al., 2017. Utilization of Social Media by Students of the Muhammadiyah University of Surakarta. *Prosiding* SEMNAS Individual Strengthening in the Information Revolution Era. Online.
- 8. Kaplan Andreas M., and Haenlein Michael. (2010). *The early bird catches the news: Nine things you should know about micro-blogging*. Business Horizons 859. Online.
- 9. Melati, Sari, 2015. Students of Social Media Users (Study of the Functions of Social Media for Fisip Ur Students. JOM FISIP Volume 2 No. 2 October 2015. Online.

- Pradita, Anggi, 2017. Level of Student Satisfaction in Using Snapchat Social Media in Pekanbaru. *JOM FISIP* Volume 4 No.2 – October 2017. Online. https://media.neliti.com/media/publications/133614-ID-levelsatisfaction-student-in-use.pdf.
- 11. Noor Kamil, Saba Kamil. "Global Cancer Incidences, Causes and Future Predictions for Subcontinent Region." Systematic Reviews in Pharmacy 6.1 (2015), 13-17. Print. doi:10.5530/srp.2015.1.4
- 12. Pussung, J. R.L., 2018. Surabaya Youth Motives in Using Instagram Social Media. Online http://repository.wima.ac.id/id/eprint/13619
- 13. Putri, N,A., 2013. Subjective Well Being Students Who Use the Internet Excessively. *Calyptra: University of Surabaya Student Scientific Journal*Vol.2 No.1 (2013) Online. https://media.neliti.com/media/publications/184582-ID-none.pdf
- 14. Valkenburg, P.M., Peter J, and Alexander P.S., 2006. Friend Networking Sites and Their Relationship to Adolescents' Well-Being and Social Self-Esteem. *CyberPsychology & BehaviorVol. 9, No. 5.* Online. https://www.liebertpub.com/doi/abs/10.1089/cpb.2006.9.584
- 15. Yin. J., dkk. 2012. Using Social Media to Enhance Emergency Situation Awareness. *IEEE Intelligent Systems* cVolume: 27, Issue: 6, Nov.-Dec. 2012. Online.https://www.liebertpub.com/doi/abs/10.1089/cpb.2006.9.584
- 16. Krishnaveni, C. (2014). Blue Brain- Artificial Intelligence in the Future Generation. *International Journal of Advances in Engineering and Emerging Technology*,6(1), 19-27.
- 17. Dr.AntoBennet, M., Sankarbabu, G., Kaushik Krishna, R., Jelcinrenis, S., Jayavignesh, B.S., & Aswin, B. (2016). Error Performance and Peak to Average Power Ratio (PAPR) Analysis for LTE-A System. *Excel International Journal of Technology, Engineering and Management*, 3(1), 5-9.
- 18. Hari, S.D. A few questions about consciousness suggested by comparing the brain and the computer(2012) NeuroQuantology, 10 (2), pp. 286-301.
- 19. Sun, P., Prakash, R. Revisiting the concepts of subjectivity and reality in many-worlds view of consciousness and super-consciousness (2012) NeuroQuantology, 10 (2), pp. 346-347.