# BORN IN SOCIAL MEDIA CULTURE: PERSONALITY FEATURES IMPACT IN COMMUNICATION CONTEXT

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#### Abstract

At the heart of community life, the media plays an important role and has different effects on society. The information contained in social media can be processed and used to predict the user's personality, which consists of social words, positive emotions, and negative emotions. Personality information can be used as a basis for the public impost of the leaders in a government. In obtaining it is required the existence of a system of personality prediction to the connexion between social media with a person's personality. The feature is obtained from the extraction method Linguistic Inquiry and Word Count (LIWC) is a text analysis program that calculates a word in a psychological category into percentage value, such as social word, positive emotions and negative emotions. The purpose of this study is to find out the relationship of personality features impact in a communication context. The selected text is 130 Tweets of public figures who are being trended topic in Indonesia. The outcomes of this study show that the speeches of public figures on Twitter could be analysed by using LIWC in refers to the personality features. It can be useful for the basic conceptual in a communication of any contexts.

Keywords: Social Media, Personality, Communication context, LIWC.

## 1. INTRODUCTION

Social networking sites have evolved rapidly over the past decade. In January 2005, a survey of online social networking sites reached 115 million people and continues to grow (Golbeck, 2005). When creating a profile in social networks, users will talk about themselves, status explanations, images, express feelings, actions, write in one or two sentences and interests, to be able to monitor their identity through social networks.

As many people know that Social Medias are the most popular link, not only in Indonesia but also in the world. Social applications popularity is already worldwide. All of them are needed for users. The people use a social link to keep in touch with colleagues, get the latest news, motivation, as business media, and find out more about anything. It has a number of features that can interact with the users.

In another line, personality is one of the acknowledged methods in the world of psychology to interpret the personality of a person, especially to find the relationship between personalities and job's performance. Personality can be seen from numerous aspects they are frankness, extraversion and other personality. Personality dimensions can be performed by using communal methods. One of the methods is a questionnaire question that encloses the characteristics of the scale from the most agreeable to the most disagree. But this method has a downside because the prediction result of the questionnaire is less valid (Damanik & Khodra, 2015).

This case is made according to the personality classification model according to the status of social networks about Linguistic Inquiry Word Count (LIWC). Based on 3

considerations when choosing a person with positive emotions, negative emotions and words. Linguistic Inquiry Word Count (LIWC) is a plaintext analysis program that calculates words in psychological categories that matter, or word analysis methods that convert status to meanings. Significance in the formulation of various experiments, including the display of attention, emotions, social relationships, models of thinking and individual differences (Pennebaker & King, 1999).

Therefore, constructing the system to predict the personality of a person through social media is considered needed as a bond between social media and personality paper. If a person's personality can be accurately predicted through this system, then the system will help many things, such as determining the level of success and compatibility of a relationship with the partner (Chamorro-Premuzic & Furnham, 2008), determining the type of music heard by personality (Rentfrow & Gosling, 2003), and individual personality types can be used to predict whether they prefer McCain or Obama as a US presidential candidate in 2008 (Jost, West, & Gosling, 2009).

Since then, this radical change in the media has greatly influenced people's perception of the media, the use of time and space, as well as access and control over the media. Communication is more than the process of sending and receiving messages/people from different cultures from us. We need to know what our ultimate goal is. Is it communication with them? Is it sells our products, services, and ideas or can influence them to change their behaviour in our favour or all of them?

The concept of communication is important for a wide range of subjects, such as cell biology, computer science, ethnology, linguistics, electronic engineering, sociology, anthropology, genetics, semantics, semantics, and others that use this word in a unique way. Therefore, information that goes into one part of the system is defined as messages that are sent to other parts of this system. In human communication, this information corresponds to what is known as a thought or mental representation (Krauss & Morsella, 2000). Which means that in the most elemental form, human communication may be created as a process in which the thoughts contained within one mind are transmitted to other minds.

Based on the previous description, it can be seen that personality is very prominent to some aspects of life, so the system of personality prediction is considered necessary. Whereby using this prediction system, the personality of a person can be known by the users quickly and accurately. In addition, this prediction system can reduce the error of personality prediction due to the individual analysis of the testers.

Software-based personality prediction systems have been developed by several researchers until now and have been applied to some aspects of life and social media (such as Facebook, Twitter, and Instagram). The purpose of this paper is to know personality features impact towards intercultural context by using word analysis from LIWC which scheming accuracy level expressed into the percentage.

In order to find a more efficient method of evaluation due to make correct information, it turns to the ability of a computer text analyser to evaluate the text of a resource. LIWC (Linguistic Inquiry and Word Count) is often pronounced "Luke") is developed by social psychologist James Pennebaker and his team at the University of Texas (Chung & Pennebaker, 2015).

The LIWC program has two main functions: Processing and Dictionaries. The processing function is a program that opens a set of text files that can be sorted alphabetically, verses, blogs, novels, and more, and then scrolls through each word-by-word file. Each word in this text file will correspond to a dictionary file (Tausczik & Pennebaker, 2010). Shortly, LIWC is a transparent text analysis program that counts the number of words in a psychologically significant category.

Linguistic Inquiry and Word Count (LIWC) is word counting software that is commonly used to quantify text in society, linguistics, and medical science. Although LIWC can measure text functions that allow text to be classified and behaviour to be predicted, the characterization of words that provide information about the psychological status of the author or speaker or main group. LIWC was developed to solve content analysis problems in experimental psychology (Faliagka & Ramantas, 2012).

Using Linguistic Inquiry and Word Count (LIWC) is relatively simple. In general, reading certain words and calculating words in percentages that reflect emotions, styles, thinking, social problems and various parts of a conversation. Since LIWC was developed by researchers who are interested in society, psychology, medicine, health, and cognition, the language category was created to arrest the social and psychological status of society (Tausczik & Pennebaker, 2010).

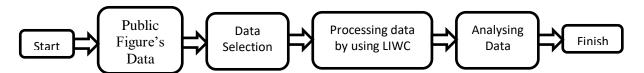
Three academic disciplines are established in the study of concepts, including education, communication, media and culture, education and globalization studies. Communication research began after World War II and became an academic department in the 1950s in the United States. Starting with early education, with a focus on international communication and voice communication and continuing to develop intercultural communication that has been recently developed and associated with the globalization of human society (Chen, 2012).

Issues of discrimination in education, communication, education, culture/media and personal research in academic studies have gradually softened in recent years. But further research in this direction is still needed. The purpose of this paper is to incorporate these concepts through an analysis of the relationship between personal media and the new communication context. When examining how new media and users' personalities influence the process of communication, the discussion topic will be discussed.

#### 2. RESEARCH METHOD

Here is a flowchart of the system design in categorising personality based on the information on social media accounts such as Twitter. The purpose of this categorising is to make it easier to identify, compare and study. Comparing means looking for similarities and differences of the characteristics of the things.

Figure 1. Flowchart Design of the Study



Based on figure 1, it shows the flowchart of the system created. Which has several processes? Where the first process is to prepare the Tweet post data of the 13 accounts. Then the data must be analysed through the selection process. Where the data should be selected to be translated into English and eliminate the abbreviation of Tweet, and the content of the status itself will be used in testing. After completing the data selection, then the data will be input into the system; LIWC to be counted. The output data (in percentage form) will be processed and analysed by using Pennebaker theories (Abe, 2011; Groom & Pennebaker, 2002; Pennebaker, 2011; Pennebaker, Boyd, Jordan, & Blackburn, 2015). In the final stages of the system will be obtained in the form of a written text that shows the meaning of each feature (social, positive, and negative emotion). The results will be used as a basis for assessing the public confidence in social communication.

The data collected are based on the Tweets from 13 public figures Twitter accounts in Indonesia. All of the public figures are being trended topic and represent his/him personality. The number of Tweets Post consist of maximum of 10 Tweets from each account. So, there are 130 data Tweets from the 13 public figures.

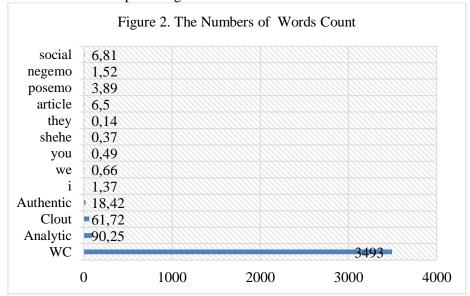


Figure 2 shows the most calculated words from all accounts (13 accounts). The basic information (130 tweets from 13 accounts) was calculated and is pre-processing, in which the extracted text will be cleared by deleting numbers, common words, etc. and focus on the three features keys such as Self-reference, emotion, and social words to improve the accuracy and efficiency of the results. Although usually words that appear from other functions reflect what may emerge from all three features.

## 3. FINDINGS AND DISCUSSION

## 3.1 The Impact of Personalities on Communication

Based on the results of the tests that have been done, it was obtained a percentage of each feature and Tweets from each account. The percentage value is derived from the calculation of LIWC2015 words count program.

No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Self- References	Mr. A	MS. Y	Mr. B	Mr. C	Mr. D	Mr. E	Mr. F	Mr. G	Mr. H	Mr. I	Mr. J	Mr. K	Mr. L
I	0,58	1,02	0,72	1,16	0	2,15	0	3,73	0	0,41	0	2,49	4,4
You	0,29	0,77	1,43	0,58	0	1,08	0	0,47	0	0	0,85	0	0,55
They	0,29	0	0,36	0	0	0	0	0,47	0	0,41	0	0	0
We	0,29	0,26	0,36	0,58	0,37	0,54	4,95	0,7	0	0,81	0,85	0,83	1,1
She/He	0	0,51	0,36	0	0	2,15	0	1,17	0	0	0	0	0
Article	7,54	7,91	5,02	5,23	6,72	4,84	4,95	8,16	2,17	9,35	5,08	5,81	4,95

Table 1. Summary of Self-References - 13 Public Figures Accounts in Indonesia

Based on table 1, it shows that the use of personal pronouns in making sentences has different meanings and tendencies (Chung & Pennebaker, 2015; Pennebaker et al., 1983; Wynne, Wheeldon, &

Lahiri, 2018). There were 6 public figures (over 1%) who use "I, me, my" repeatedly and tend to have depressed meanings, lack of confidence, disappointed, and feelings of approbation. This is so contrary to the attitude they show in public. On the other hand, there were only 2 public figures (15%) who use "they, she, he" repeatedly and tend to have "good" meaning in managerial. Shortly, it has a correlation with their leadership in their institution. In contrast to using "we", when a person is more likely to use the word "we" and tend to avoid in using the first person then that person is indicated "lie". In this case, there were 3 public figures (23%) indicated "lie". Lying here is related to the content of the statements they post in public. However, it would be different when someone not only uses "we" but also uses "you and me" then that person is indicated "powerful". In this case, there were 2 public figures ( $\geq$ 1%) or 15% of total public figures who have positive power.

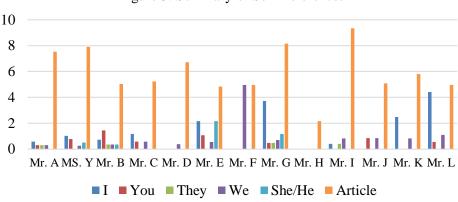


Figure 3. Summary of Self-References

Figure 3, shows that each public figures of each party have a tendency to use any articles. It means that the meaning of the statements are very clear and shown to someone who is clear as well.

No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Emotion	Mr. A	MS. Y	Mr. B	Mr. C	Mr. D	Mr. E	Mr. F	Mr. G	Mr. H	Mr. I	Mr. J	Mr. K	Mr. L
Positive	3,19	4,34	1,08	6,4	1,49	3,23	0,99	2,1	4,35	2,03	4,24	8,71	7,14
Negative	0,87	2,55	2,15	1,74	1,49	1,08	0,99	1,86	0	0	3,81	1,24	0,55
Social Words	5,51	7,14	7,14	3,49	5,97	10,22	5,94	10,72	3,62	4,88	6,36	3,32	7,69

Table 2. Summary of Social-Emotion - 13 Public Figures Accounts in Indonesia

Table 2, shows the results of Tweets' calculations and analysis of 13 public figures. The results show that 8 public figures or 62% of the thirteen parties (above 1%) write statements and have negative meanings on each their posts. Moreover, 38% of the remaining parties tend to be normal (looking for safe spots). The negative content of the material is caused by several factors, including refuting others' judgment of a certain figure, self-defences from the negative issues, and opposition party resistance. It can be concluded but it cannot be generalized that the figures have bad personalities which are correlated to the quality of the party's human resources. It would be a consideration to the public appraisal from the citizenry.

On the other hand, there were 7 public figures who tend to write and make statements on positive meaning (more than 2% average of positive and negative value). Positive personality value was created to the goal of positive correlations on a social image. The point is the public figures tend to make positive statements to build a positive social relationship as well. Although

between positive and negative emotions of all the public figures have a common goal tendency in creating a good relationship with the social society.

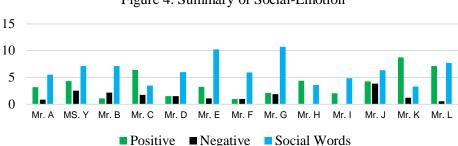


Figure 4. Summary of Social-Emotion

Figure 4, shows that each public figures have emotional variations that ultimately focus on creating a positive relationship with the social communities.

## Discussion

Social media, representing all web applications that allow interactive interactions to interact with each other, provide an environment for sharing all types of content and created by other media. Anthony Mayfield classifies social networks, such as microblogging, social networks, wikis, podcasts, forums, and content groups. Social networks allow people to chat with friends and share content using their own personal web sites. Examples of social networks like Facebook, Myspace, Wikipedia, Apple iTunes, YouTube, and Twitter (Mayfield, 2014).

In our era, thousands of years, especially online communication (93%) and 63% of young people online, daily demonstrate the power of social networks in society. From this point of view, social networks will become not only a channel for personal or corporate communication but also for social communication. In addition, social networks will expand and increase activity every day. In other words, in addition to popular apps like Facebook and Twitter, social networks work in many ways in everyday life (Wooley, 2013). Spending many activities in one day, social networks will play an important role in the social activities that take place. Social networks help people realize themselves and want to freely use this medium. Derivatives for newly developed media are important for publishing and sharing information. When people unite, social networks bring communities into one group. This creates an environment that links social movements and accelerates their reality. In this way, various and broad bases for intercultural communication are created (Engin, 2011).

With globalization, intercultural communication and social networks have developed quickly and important relationships (Lazar, 2012). Until recently, personal communication was very important, while communication was not as important as the process of communication developing through social networks. Social media together describes all the channels that allow personal communication on the Internet. From posting to posting on Facebook, endless digital media is used (Wooley, 2013). In addition to being a practical tool for disseminating information, social networks play a very important role in creating new multicultural relationships (Piechota, 2014). In addition to related concepts, social media and intercultural communication are phenotypes that influence and build relationships with each other. For this reason, using social media in communication between cultures, which leads to adaptation and community feelings. Adaptation is an important factor in the adaptation between cultures and social networks that have influenced this process. Study of the interaction of migrant workers arriving in America with social networks in the process of adaptation to intercultural communication (Sawyer, 2011). From this study, in the process of adapting to American

culture, immigrants get a lot of information through social networks before coming to America. In other words, social media plays an important role in intercultural adaptation. It is also an influential factor in the development of community feelings. Cultural communication creates a sense of ownership and integration with a new culture. These processes are supported by social networks that play an important role in their development. Similarly, through social networks, they can easily communicate with friends and family they leave. Social networks are a channel where people can chat with friends and family to find out and learn about current events.

New media has some outstanding features, including digital convergence and interaction (Lister, Dovey, Giddings, Grant, & Kelly, 2009; Taiwo, 2010). First, digitalization is the most prominent feature of new media. New media or digital media dematerializes Media messages by converting data from analog to digital, which allows all types of mathematical operations. New media also allow you to extract large amounts of data, manage and store them in a limited space.

Secondly, the new media will include the forms and functions of information, media, electronic communications, and electronic payments. The effectiveness of the convergence of new media can be easily demonstrated by the emergence of the Internet in terms of powerful features embedded in computer information technology and high-speed communication networks. It also led to the convergence of the industry, represented by the continuous integration of large media companies and the convergence of products and services, which can be seen from the successful links and combinations of Materials, products and services in the media industry.

Third, the new multimedia interaction feature is the use of data resources between the user and the system, which allows users to have more freedom to create and play back content and data format during the interaction. In addition, new multimedia interactions make the interaction between different networks and data retrieval through different operating systems accessible and convenient. Freedom of control over information makes new media a great force in the processes of human communication. The boundaries of human society in terms of space, time, scale, geography, functions, values and beliefs are changing and rapidly changing in a new form of similarity and connection (Chen, 2012).

### 4. CONCLUSION

With globalization and advances in technology, cultural communication is more connected than ever and begins to influence each other. Especially due to the increasing use of social networks, it is necessary to analyse the influence of the personality of users on social networks in the context of communication. In this paper, the role of the personality of the user influences the form of communication in social networks and he is examined using qualitative analysis. The study found that public tweets can be analysed using LIWC in terms of personality traits. The impact of new media integration and globalization can be reduced to three precisely: a world that shrinks in time and space, and close interactions in various areas of society.

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