Computerized Text Analysis on Self-Description Text to Get Student’s Prevailing, Confidence, and Drives

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Abstract. Using a sample of 26 participants, we asked the students to prepare a text in written self-description at the end of the final path presentation in the sixth semester. One interesting thing is the relationship between personality differences and the types of words that people use. Recent studies cover observing the relationship between personal qualities and the use of language in creating self-description. Text files are organized for transcription LIWC analysis to calculate the percentage of clout, authentic, and drives that student’s use. The results supported this possibility: LIWC’s clout, authentic, and drives dictionaries can be used as indicators of the student’s prevailing, confidence, motives and needs, we found that when calculated on written text, LIWC scores were connected with language dimension and psychology issues. These findings recommend that LIWC clout, authentic, motives, and needs dictionaries possibly will catch self-reported subjective emotion experience when applied to everyday activities. To enrich students’ confidence, power, motives, and needs toward the psychology issues faced by the students, students should be stimulated to discover the field of psychological processes and linguistic patterns by detecting their emotional and perceptual experiences.

1. Introduction

Although the idea that language and personality do not matter, researchers have just begun to systematically study how the use of words is associated with personality differences [1] [2]. The latest results show that natural language patterns reveal the psychological characteristics of people [3]. Stand out with still very personal, which makes the optimal optional for exploring the distinctions of the individual [4][5]. The difference of language has become a key factor in social and personality psychology.

A study shows that there is an important relationship between the use of words and five personality models. On the other hand, there is an insignificant relationship between personality traits and language use [5]. But before accepting this conclusion, there will be several explanations of alternative explanations. Before the initial research, many exercises showed unstructured data flow. Different participants tend to approach this letter through various special behaviours that may increase measurement errors. Second, there is not enough influence on the length of the original writing to be able to observe a person's personal effects. In particular, one's writing style is considered to lack a strong influence on personality detection and self-expression.
Writing form that is close to the person is the scope of self-development. There is now a lot of research devoted to the expression of individuals in a broader language area [6]. This study is based on the idea that personality is structured in terms of personal storytelling. And culture, most of which are language mediators [7]. Stories of individual lifestyles, including subjective explanations of past and future, appear as their centre and identity. It is reasonable to assume that the use of speech patterns in speeches can reveal a stronger relationship with personality characteristics than those found by using the current consciousness or essay writing practice. Because personal storytelling is important to themselves, their content and style should reflect personality differences in various ways [8].

Therefore, it is possible that the magnitude of the effects of preliminary studies on personal properties and the use of words cannot be generalized in every language production. Indeed, the next study that the participants of the 1-hour semi-structured course interview revealed the link between language usage and personality measurement [1] and pointed out that the use of predictive behaviour rating. Therefore, modern studies try to combine the use of words and narrative methods with the survey personality, how self-assessment of personal qualities relates to the use of words in the narrative process by themselves. Undergraduate students must go through two automated writing processes, one of which will help make the story about the past and plans for the future easier. The advantage of this method is that you can use a lot of sample letters, standard processes, and write expressions in areas that are very important to you. Hope that personality traits will become important predictors of the use of words in their own written stories.

1.1 Language Dimension

Clout - Clout refers to the term of self-confidence. That’s why many people are trying to find it. On the other hand, you can convince the person who speaks clearly to stand up. His head answers the question with confidence and is ready to accept when he doesn't know anything. People who believe in themselves inspire others: viewers, colleagues, bosses, customers and friends, and trust from others is one of the important ways to succeed with people.

Authentic - In positive psychology, planning about the importance of quality of life becomes interesting to be well prepared [9] [10]. Nowadays, in general psychology of counselling, the most basic and important aspect of well-being is accuracy and not just as a prerequisite for well-being [10].

Pretending that lack of truth causes psychosis and suffering because it causes people to engage in forced and unnatural behaviour that causes them to feel upset or humiliated. After that, it is believed that promoting legitimacy can improve well-being because it helps people to have clear and consistent feelings of self that lead to their goals [11][12].

Drives - When someone tells the same story, they will not necessarily use the same method. Different words can affect different interpretations of a story. The use of the right words can maximally explore more in a story. This is a window into the world of storytelling [13]. The overall dimension is a combination of Achievement, Affiliation, Power, Reward, and Risk [14].

2. Method

2.1. Participants

Participants consisted of 26 undergraduate students from the Universitas Muhammadiyah Lampung (15 female and 9 male), with an age range of 21-22 years. Students come from the third-year undergraduate psychology classes. At the end of the session, participants get extra time for mentoring. The sample consisted mainly of students from Bandar Lampung, Indonesia.

2.2. Materials

2.2.1. Writing assignment

Participants were asked to write their descriptions. This process was facilitated by a self-study that guides participants through the writing process. Participants were asked to indicate three things in their lives: People, things or places. Participants were asked to write a few paragraphs of descriptive text. This includes writing specific sections of the identification and description of the participant. The homework was performed periodically throughout the entire duration.
2.2.2. Linguistic Measures by Linguistic Inquiry and Word Count (LIWC)
LIWC is a widely used tool that defines common English words as one of 68 different categories. (Such as pronouns, adverbs, work-related words, religious words, etc.) [8] [15]. This software accepts frequencies for many words, sorted by type, psychology, and language. The analysis in this study is limited to the personal problems of the initial dictionary and the psychological category of the word LIWC2015, which seems to be the most psychological information. The LIWC classification process involves well-trained judges. The LIWC output shows the number of words in this category as a percentage of the total number of words in the sample letter.

2.3. Procedure
Participants were advised for access to online training materials and were free to fill the elements according to their needs. Then participants were asked to fill out written documents at the end of the semester, starting with self-explanations and ending with future description. At the end of the semester, students were asked about the nature of their education and they are recognized for their time.

3. Result
3.1 Language Extraction from LIWC
Is the word-count code program that describe kind of emotional, sensory, and cultural operations, too as references to personal space and orientation, motion, work, leisure, metaphysical matters, and physical states. In a view of psychological perspective proves that function language usage reflects and is a dependable marker of personality and a variety of mental processes, cognitive thinking styles and psychological states [16]. Self-description of students at Universitas Muhammadiyah Lampung, Indonesia was the data for this study.

Figure 1. Words Count Data of Each Student

Figure 1 shows the number of words most frequently displayed in the student's self-description. Source test was first calculated and processed, and the extracted text was compiled without punctuation, numbering, common words, etc. The main focus is on three main functions (Algorithmic Language); Clout, Authentic, and Drives to indicate which language students are using. Although each word that appears from other attributes usually represents what can be displayed with the three features Since the example of this paper was taken from the first language source (Indonesia), it is important to consider in advance whether they have language features or not, encoding, deletion, etc. It was performed for initial data processing.

We decided to measure this observation for the students with a lot of text by comparing the language sizes of the entire text with different sizes for different sample sizes. We calculated and compared the values for LIWC personality measurements and all values dimension. The sample size is calculated by
the number of words. For example, we are trying to set a threshold value of 26 texts in a student’s self-description. So, we took all the texts and computed the linguistic measures for those texts.

Figure 1 shows the usual variability for text data ordered by student’s self-description, where the total word counts for each student was 600. This guides that variability is an important metric to amount when evaluating new models. How much text is sufficient? Of course, that be influenced by the required care, and whether an average or entire measure of variability is required. In general, longer message size is required to make the output of the data analysis be assured, dynamics, and thoroughgoing.

**Figure 2. Extraction of Language Dimension – Drives**

**Figure 3. Motives and Needs Features of Drives**

Layers of the students told in reaction could arrange for main clues to their requirements for affiliation, power, and achievement [16]. In this case, qualified raters read the texts of student’s descriptions and marked words or phrases that characterized the dimensions the agents were studying. Once the most ordinarily used dimensions were observed, two categories seemed. These were categorized as Affiliation, Power, and Achievement. Students who discovered the affiliation to others looks to have positive social communication; students achievement revealed the orientations to success and failure or achievement struggling. A high number is associated with positive success; students who mentioned higher numbers of power are associated with control in social grading.
Figure 4. Extraction of Language Dimension - Authentic

Figure 4 shows the language abbreviations in authentic dimension. The correctness or knowledge of someone's beliefs and feelings and following them is the same as 'being yourself' [17]. The concept of validity is to think about building between self-knowledge and self-control of behaviour. From this perspective, knowledge of the best things can significantly impact people's lives because it helps them to create good lives as an archer with the goal of trying [9]. From this point of view, authentic operations are the result of continuous operational activities with great intentions. Authenticity has potential value, although if “being yourself” can lead to negative reactions from others. But “being yourself” can set people apart and classify them differently [17].

Figure 5. Extraction of Language Dimension - Clout
Figure 6 shows that the dimensions of the LIWC is the percentage of the total number of words in the text. The use of “I” are the percentage of the pronouns used (I, me, my) and we, you, she, he, their. Clout can be felt when using the pronouns of people and the number of words. This self-reference is an indication that people are involved in responding to the mission of self-explanation and passion.

4. Discussion
LIWC was applied to analysed each transcript [18]. LIWC uses more than 2,300-word counting strategies or keywords in each text file. This study is divided into three areas according to linguistics: clout, authenticity, and drives. After counting the number of words in the text for each category, the results will change the estimated number to a percentage of the total number of words.

4.1 Clout
Using pronouns indicates that one person speaks in his own way. The only use of the first person shows that he expresses his thoughts and feelings, and the use of the first person in the plural allows him to communicate with others. Pronunciation often shows that the speaker immediately makes a difference between him and the listener. Using third-person pronouns refers to others who are publicly known [19]. Pennebaker was disrupted by views and personal concerns. Even on important topics during a police investigation, He expects his answers to have phrases like "I think" or "I'm worried". Earlier in his running, he said these words "we" or “you” than “I”. During this time, a phenomenon that often occurs when people feel depressed and lonely, socially, or emotionally [20][21].

4.2 Authenticity
Many are taught by parents, teachers, and friends about the importance of "being who you are." The biggest achievement is being yourself in a world that is trying to keep you as something else. Being yourself will lead to better results than trying to be a person or something else. The authenticity or knowledge of their thoughts and feelings and their actions are synonymous with you [17]. One of the potential consequences of authenticity or "be yourself” may be separated from others and marked differently. It has the potential to adversely affect your well-being. Although "being yourself” can lead to negative reactions from others, which negatively affect well-being, but "being Yourself" can also make people stand out and stand out positively. In the case of this article, what makes more people true, and when is it useful to them and when?

Psychosis and suffering are caused by a lack of authenticity and it will make a person unnatural, frustrated and unappreciated [22]. Someone needs to have authenticity because it has a positive impact.
and capable of directing others to get a better life and full of confidence and surely be consistent with the purpose of life [12].

Openness to accept, respond, and think openly about an emotional reaction then it called by an authentic person. When doing something without limiting oneself and identity in daily life, that is the definition of authenticity [9] and claims that it has four components: awareness, dispassionate processing, behaviour, and relational orientation. The orientation of awareness means knowledge and perception in all its parts - emotions, qualities, strengths and weaknesses, desires and motivation, etc., and not just a special perception of itself. For example, to be honest with yourself and accept your own part, that can conflict and contradict with each other. Awareness also includes the desire to learn more about yourself in order to increase your own knowledge. Rough processing means evaluating the allocation of relevant information regardless of internal or external data sources. This objectivity leads to a sense of self-confidence due to a lack of bias or defence mechanisms. The actual behavioural component refers to actions that are based on internal values, needs, and internal satisfaction and are not the result of external goals. The final part of authenticity is a relational orientation or the true identity of close relationships. This requires open self-disclosure and openness to convey both good and bad sides of yourself to close others. On the other hand, this also includes the idea of being yourself, but it depends on your perception and your ability to judge yourself.

Authenticity levels, weather conditions or characteristics related to life satisfaction and self-esteem indicators of well-being. It seems to apply to yourself, even if it separates one person from another, it is not completely negative because people must be different from others. Even if someone is involved in authenticity, he is completely different. The student’s credibility and uniqueness provide a positive impact on the work of psychology in any fields of life. Students with higher living standards report high confidence and moderate identities. In general, a positive psychologist can use his or her knowledge of validity and identity to develop an understanding of "Be yourself."

4.3 Drives
The drive consists of several dimensions, namely Achievement, Power, Reward, and Risk [5]. The study of linguistics and psychology is considered necessary to study the dimensions of achievement, power, and affiliation. Methods for counting psychological words are found both for the analysis of the content (what they say) and the form of (how they speak), but sometimes they require a rather diverse analysis of the language (active or passive voice). The current method is to count simple words, such as general grammar lists (Pronoun, preposition) or psychological dimension, which is made in psychology words. The word counting strategy is based on the theory that people use to convey psychological content that goes beyond an accurate and independent understanding of their semantic structure [23].

Achievement is an ability for relishing the mastery of interesting tasks. It means the students were desired to have their mark based on their work or others in the class. Besides, affiliation is a capability for appreciating close, pleasant interactions and connect with friend, lover, soul mate, beloved [24]. For this, the students would anxiety the class to have alone or group assignments: social and friends. And power is an aptitude for relishing one’s impression on others. For power, the students would be involved in learning to accomplish hypnosis [5]. Shortly, the result shows that only 0,23% student’s deficiency of power in the social. Speakers use it to avoid coercion and give the speaking partner the choice. Speakers can avoid the impression of coercion by emphasizing the interests of others by using apologies, or by asking questions that give the possibility to answer "No" [3], [4], [13], [23], [25].

5. Conclusion
It seems that personality traits are clearly related and effective in using words through self-explanations. Writing exercises include a lot for yourself, as well as personal statements that arise, creating important characteristics of a person's personality [26][8]. In addition, participants took a lot of time and effort to make these writings that were deeper, more personal, and longer, easier to access in laboratory tests. The crucial confines of the study reveal the restrictions of the LIWC itself. While LIWC analysis has verified very worthwhile for groping several psychological spectacles [3], [13], [23], [27], and is
exceptional in its systematic methodology, it silently only observes the use of words, instead of providing information about the structure that includes these words. Since the written address uses many levels of analysis (words, sentences, paragraphs, pages) at the same time, if you don't feel it, most of the written experiment is unsuitable for counting simple words. Analytical methods that consider a higher semantic structure would be clear if they were created. A second and consistent limitation is that each LIWC category includes statistically related terms that may be associated with different meanings. Therefore, classes should not be considered as an ideal description of their content. But this is a group of relevant words that are reliable enough.

While positive participation can be restructured into elements that maintain accuracy and uniqueness and can create new positive engagement. This participation can help people realize their true self through self-reflection, motivate them to manage their true self in their responses and provide a positive solution to reveal their uniqueness that does not affect demand.

Positive participation can also inspire people to receive the identity of others, such as “powers identifying” exercise that is used according to the strength of the character. Collections of the remaining examples of true and unique personalities can be created to allow people to focus on the paradigm of successful people themselves. To maintain authenticity, we must first understand that our presence in human situations is often surrounded by cultural boundaries. The results of this study show that patterns in the form of strong content coding tests can be evaluated through prejudiced rectilinear arrangements of the LIWC category that has a great convergence from power, achievement, and affiliation.

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