Analysing literacy and other psychological tendencies using linguistic profile in English expressive writing: Are students able but unwilling to write?

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ABSTRACT
The use of English in educational settings has become quite common in order to achieve global competitiveness. Given this fact, students are required to be fluent both in oral and written English. Unfortunately, the significant discrepancy is often found between the two. Students seemed to struggle when asked to elaborate their ideas in writing. With that in mind, this study would elaborate on the linguistic properties of students' writings in order to understand the linguistic processes affecting such a discrepancy. Writings from a total of 205-business students were analysed using Linguistic Inquiry Word Count (LIWC2015) focusing on the linguistic and grammatical properties such as word counts, tenses associated words, adjectives, adverbs and so on. We found that our samples' writing profile was significantly different from those of LIWC2015, especially in properties such *word counts, six-letter words*, *verb* and *adjectives*, as well as the use of *I-related pronoun*. For example, we found that our sample used a lot more difficult words while wrote less than half of the global population, suggesting their ability as well as unwillingness to write at the same time. With this main finding, we concluded that students come short in terms of critical literacy. In addition to that, we would also discuss the potential psychological implications (narcissistic tendency) as well as the differences between men and women styles in writing.

Keywords: Expressive writing; literacy; LIWC 2015; second language fluency

INTRODUCTION
There are some common conceptions regarding Indonesians in learning: from being afraid of being wrong, lacking the initiative to learn, to simply lacking effort to communicate—especially in written communication. A study in a university in Indonesia, claimed inadequacy in structured idea delivery, causing flawed and inefficient narrative (Ramadani, 2014). In practice, many educators complain that students tend to be too simplistic when trying to elaborate their ideas in writing. It results educators to wonder what ideas these students are trying to convey. However, this problem is not as often found as in verbal communication where students seem to be able to elaborate their ideas in a more detailed manner.

This particular condition is even worse when a second language—for example, English—is used. In this context, students are not just required to have an

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idea or an argument, but also to be able to present both in a language they are often not quite fluent in. This need can become a problem, especially in this globalized era in which education is directed toward national competitiveness (Light, Zhou, & Kim, 2002). It is expected that each individual should be able to compete, not only with individuals from the same nation but also globally. This goal has become quite a tricky matter as there are a lot of factors interfering with an individual's survivability in this big competition. These factors vary from resources, culture, and eventually, language (e.g., Lazear 1999; Graham, 2001; Pennycook, 2017).

Of course, one's ability to communicate well is determined by his or her linguistic capacity (see Schmidt, 1992). When an individual is familiar and fluent in one language, he or she will be more likely to communicate better in that particular language. For this very reason, many education programs in Indonesia have started to use English as its language of instruction to promote student's fluency in the hope of preparing them for global competition. Unfortunately, being adaptive in this second language does not necessarily mean that students will be able to communicate well—both in effectiveness and quality. Again, we see that students tend to be more verbally communicative. Indeed, educators have great esteem for verbal communication; however, especially in academic world, if the students seem to struggle to write, it might indicate a bigger problem (see Boice & Jones, 1984; Jones, 1995; Landon & Oggel, 2002; Cummings, 2009).

Nowadays, writing is seen as a process rather than a product, suggesting the benefit of writing as cognitive training (e.g., Murray, 1972; Flower & Hayes, 1981; Tompkins & Jones, 2008). While reading contributes to the information inputs and updates, writing has been proven to increase systematic thinking and coherent ideas (Olson, 1996; Flower, Schriver, Carey, Haas, & Hayes, 1992; Menary, 2007). In other words, people with better writing skills tend to be better communicators overall. Not only that, writing skill has been found to correlate positively with reading as well (see Holliday, Yore, & Alvermann, 1994; Fitzgerald & Shanahan, 2000). Avid readers tend to find writing easier than those who don't read; avid readers also produce better writing qualities. These findings suggest that those struggling to write tend not to read enough as well. At the same time, students who struggle to elaborate their ideas tend to be less able to communicate effectively—and the content of their arguments are often questionable. Should this problem occur—and persist—it will not only affect the individuals themselves, but also others, and eventually, the educational quality of the nation.

We already know that an individual's ability to read and write impacts one's cognition in many ways (e.g., McCutchen, 2000; Kelley & Kohnert, 2012). Hence, it is important to get a better depiction on how literate Indonesian students are. This research will be a good start in understanding our literary culture, as well

as its potential implications in real-life settings. Based on the phenomena outlined so far and consistently with the title of this paper, this research focuses on the writing part of literacy.

Decades ago, an individual was considered to be literate if he or she was able to recognise letters and words and to put them together in a meaningful way. Nowadays, however, literacy goes beyond that functional point of view (see Bormuth, 1973; Street, 2003). Now, literacy also includes one's ability and intent to critically assess, process, and convey written information (Freire & Macedo, 2005*;* Luke & Dooley, 2011; Luke, Dooley, & Woods, 2011). In another word, an individual is considered literate not only if he or she can read, write, and recognize a lot of words, but also if he or she can and wants to elaborate or explain a process.

Given those specifications, the main thing we are going to discuss is students' willingness and potential ability to elaborate their ideas in writing. It's done by assessing the linguistic and grammatical properties of their writings, such as word counts, longer words, the use of pronouns, and so on. Studies have found that these linguistic properties serve as markers for some psychological processes (e.g., Pennebaker & Graybeal, 2001; Ramirez-Esparza, Chung, Kacewicz, & Pennebaker, 2008; Schwartz et al., 2013); hence, we expected some insights regarding students' writing and thinking habits. For example, how much a student wrote can mean how much he or she was engaged with the task. Meanwhile, linguistic profiles here would refer to the distributions of those properties—such as word counts, words per sentences, six-letter words, pronouns, and adjectives, among others—in contrast of those of previous studies compiled in the LIWC2015 (*Linguistic Inquiry and Word Count*, 2015 version) manual (Pennebaker, Boyd, Jordan, & Blackburn, 2015). We understand that choosing to primarily assess those properties instead of logic, grammars, and fluidity of ideas might seem counter-intuitive in assessing literacy. However, such indicators would result in quality scores—such as how good or bad and right or wrong—hence, it wouldn't depict one's cognitive process and innate potential. Following that data, we will also discuss some interesting findings such as differences in the linguistic profile of our sample in comparison to the global population, as well as gender differences in writing.

METHOD
The data were gathered using an online survey sent to each students' email address as part of the annual study assessing students' adjustability in the program. The survey was administered to second and third-year students in the largest business school in Bandung. A total of 293 business students were recruited, and 250 data were returned to us. From those, a total of 45 individuals either skipped writing the narratives or wrote ones that were too short to analyse (e.g., they simply rewrote the instruction). Thus, we decided to

analyse texts at least 30-words long. Following the process, total participants of this study were 205 individuals majoring in business (mean age = 19.45 years old, SD = 1.006) in the largest business school in Indonesia. In addition to some demographic data (age, sex, and GPA), they were asked to narrate their experience studying while in the program. The nature of this narration focuses on an individual's own freedom to disclose whatever it was they wanted to express, from emotions, beliefs, observations, and so on. This type of narration is what we refer to as expressive writing across this paper (see Pennebaker, 1997, 2004). Additionally, because English is the program's language of instruction, they were required to write in English. This narration is what would be referred to as expressive writing. Essentially, expressive writing is

Those data were processed using the 2015 version of LIWC software and then analysed using SPSS. It is important to note here that LIWC assessed a lot of properties of the texts it processed. In general, the premise of LIWC is to sort and categorize specific words into certain linguistic (e.g., word count, six-letter words), grammatical (e.g., pronouns, articles, tenses-associated words), and psychological properties (e.g., emotions, cognitive processing). It results in an individual's profile of his or her text referring to the proportion of each categorical property within the text. However, given our research aims, our analysis focuses on grammar and linguistic properties alone. This decision would allow us to focus on their writing style without distractions from any psychological contents. The list of property categories and what each refers to can be seen inTable 1.

Table 1. Definition of each linguistic and grammatical properties

Categories	Definition
Word Count	The Number of words written by each individual in their narrative.
Word per sentences	The Average number of words per sentences per individual. A sentence is defined by specific punctuations such period, question mark, and exclamation point.
Six letter words	Words that are at least consisted of 6-letter, for example, emotion (7-letters), eating (6-letters), and so on. This category indicates an individual's proficiency in the language as it is assumed that longer words tend to be more difficult to remember and spell (Tausczik & Pennebaker, 2010).
Word in dictionary	Percentage of words per narrative recognizable by the LIWC2015 dictionary. In total, there were around 6400-words and its derivatives in the dictionary. For example, in a sentence such as "I love studying in thiss school." We would have 5 out of 6 words (83%) recognized by the software's dictionary, the word *thiss,* which is a typo, would not.
Pronouns	*[self-explanatory]*
Personal pronouns	
I	Including words associated with I, me, my, and mine. Excluding one's own name as it wouldn't be recognized.
We	Including words associated with we, us, our, ours.
You	Including words associated with you, your, yours.
He/She	Including words associated with he, him, his, she, her, hers.
They	Including words associated with they, them, their, theirs.
Impersonal pronoun	For words associated with it, that, this, any/some-body/one/thing.
Articles	For a, an, the.
Preposition	Including words such about, down, in, without.
Auxiliary verbs	Including to-be (am, is, are, was, were), to-do (do, does, did), to-have (had, have, has) modals (will, might, should, ought).
Adverbs	*[self-explanatory]*
Conjunctions	Including words such also, though, if, and.
Negations	For all words suggesting negations such no-, none, nothing.
Verbs	*[self-explanatory]*
Adjective	*[self-explanatory]*
Comparisons	For second and third form of superlative words such better and best, worse and worst, nicer and nicest.
Interrogative	Including words such how, what, when, where, why, who, whether, which.
Numbers	*[self-explanatory]*
Quantifiers	Including words such add, minus, both, none, less.
Punctuations	*[self-explanatory]*

Additionally, we also conducted a content analysis of students' writings as secondary data. Here, we read and coded each of their narratives on their experience at school. Inter-rater reliability was used in scoring each entry of data. There were two major aspects assessed in this content analysis: the themes of the narratives and its grammatical quality. *Theme* refers to participants' major object of discussion, for example their feelings, achievements, friends, and the interaction of such among others. Meanwhile, grammatical quality refers to the accuracy of grammar they used. In terms of grammar quality, students' narratives were read, and grammatical mistakes were tallied. We acknowledge that rating method was not ideals as none of the raters has perfect knowledge on English grammar; however, we did try to minimize rater-error by choosing raters that scored at least equivalent to 105 in IBT-TOEFL and writing score 24 or higher.

RESULT

Our statistical analysis found that 61.95% of our sample were female. The mean of GPA is 3.32 (SD = .375). There was no significant correlation between GPA or age to any linguistic or grammatical properties. There are two major findings presented in this section; those are descriptive statistic for grammar and linguistic properties along with LIWC2015 (Pennebaker et al., 2015) data for comparison and gender differences in some categories.

The details of descriptive statistics can be seen in Table 2. On its second column, we can see LIWC2015's data summary on Expressive Writing which was used in our study's writing procedure. For the three earlier categories (*word counts, word per sentences*, and *six letter words*), each number refers to the number of words used. Meanwhile, for the rest of the categories, each number represents the percentage of words from each category to the total words in the text. For example, should 'A' write down a 1,000-words narrative that had 25 I-related pronouns (such: I, me, my, mine), then A's I-category would have scored 0.025.

Table 2.Descriptive statistics of grammar and linguistic properties

Categories	LIWC 2015*	Our Participants' Data			
		Mean	Min.	Max.	SD
Word counts	408.94	171.87	30.00	641	122.75
Word per sentences	18.42	20.97	4.71	86.25	9.60
Six Letter words	13.62	19.71	9.09	42.11	4.87
Word in dictionary	91.93	90.23	0.00	100.00	11.76
Pronouns	18.03	16.70	0.00	28.57	4.96
Personal pronouns	12.74	10.92	0.00	18.92	3.73
I	8.66	9.78	0.00	18.45	4.01
We	0.81	0.53	0.00	6.35	1.11
You	0.68	0.10	0.00	3.33	0.39
He/She	2.01	0.04	0.00	2.67	0.24
They	0.57	0.46	0.00	5.94	0.86
Impersonal pronoun	5.28	5.78	0.00	13.43	2.57
Articles	5.70	4.89	0.00	11.36	2.50
Preposition	14.27	14.86	0.00	24.79	3.63
Auxiliary verbs	9.25	7.94	0.00	15.62	3.00
Adverbs	6.02	6.09	0.00	14.55	2.74
Conjunctions	7.46	7.68	0.00	16.67	2.80
Negations	1.69	1.40	0.00	5.71	1.30
Verbs	18.63	15.99	0.00	25.24	4.10
Adjectives	4.52	6.33	0.00	16.67	2.96
Comparisons	2.42	4.01	0.00	16.67	2.52
Interrogative words	1.49	1.60	0.00	7.59	1.33
Numbers	1.89	0.62	0.00	18.18	1.45
Quantifiers	2.27	3.92	0.00	13.16	2.22
Punctuations	12.41	11.13	2.61	25.00	3.87

*) LIWC2015 data were excerpted from (Pennebaker et al, 2015). There were no additional distributive statistics properties presented there, hence, we couldn't provide a more detailed statistical analysis comparing the two.

As we can see on Table 2, some categories were significantly different from the global sample of LIWC2015. Those categories were *word counts, six-letter words, personal pronouns, verbs, adjectives,* and *comparisons*. Though we could not make a definitive conclusion on the significances of their statistical differences due to the unavailability of LIWC2015 distributive statistics data (e.g., *range* and *sd*), we could still see that our subjects' *word counts* was not even half of the global population and their *six-letter words* was over 5-points ahead. Our subjects' use of *you-* and *he/she-pronouns* were less than a quarter of the global population, and their *comparative-associated* words were around one and a half more. The possible implications of these results would be discussed in the next section.

As mentioned earlier, we also found some interesting findings regarding gender differences in some categories. It is interesting because we didn't plan to assess it and we wouldn't have guessed that the results would be significantly different from common conceptions. Score differences happened in some categories; those were: *words per sentences, six letter words, pronouns, auxiliary verbs, adverb, negations,*

and *punctuations* (specific for *periods* and *commas*, but not in others). Except in *words per sentences, six letter words,* and the use of *comma*, women scored significantly higher than their male counterpart. We will discuss these results more in the next section. Detailed mean differences between the two groups can be seen in Table 3.

In general, participants' writings were easy to understand in the term of the content. We found three major categories of how students narrated their experience in regards to their emotion: positive (e.g., feeling happy, excited, proud), negative (e.g., depressed, sad, stressed, rejected), and ambivalent (e.g., happy but rejected, enjoying the school but feeling rejected). Regardless of their narration type, there were two consistent themes across these data. Those were social interaction as well as personal effort and achievement. Social interaction theme focused on students' evaluation on the quality of relationships they have with other social agents, including peers, lecturers, assistants, and the community. Meanwhile, personal effort and achievement theme referred to contents associated with a sense of mastery.

Table 3. Gender differences

Categories	t	df	Sig. 2-tailed	Mean Diff.	Std. Er. Diff.	95% Confidence Interval of the Diff.	
						Lower	Upper
Word counts	-0.51	132.33	.609	-9.64	18.79	-46.81	27.53
Word per sentences	2.71	190.00	.030	3.96	1.46	1.07	6.84
Six letter words	2.05	104.78	.027	1.66	0.81	0.06	3.26
Word in dictionary	-1.16	88.11	.251	-2.48	2.15	-6.75	1.79
Pronouns	-2.01	116.13	.038	-1.57	0.78	-3.12	-0.02
Personal pronouns	-1.90	111.16	.060	-1.15	0.60	-2.34	0.05
I	-1.62	110.33	.108	-1.05	0.65	-2.34	0.24
We	0.50	115.30	.620	0.09	0.18	-0.27	0.45
You	0.15	142.53	.881	0.01	0.05	-0.10	0.11
He/She	0.27	146.46	.790	0.01	0.04	-0.06	0.08
They	-1.72	177.92	.088	-0.20	0.12	-0.43	0.03
Impersonal pronoun	-0.99	105.30	.323	-0.42	0.43	-1.27	0.42
Articles	1.94	110.37	.055	0.79	0.41	-0.02	1.60
Preposition	-0.30	114.62	.763	-0.18	0.58	-1.33	0.98
Auxiliary verbs	-2.06	135.12	.043	-0.93	0.45	-1.83	-0.04
Adverbs	-2.17	116.68	.025	-0.94	0.43	-1.80	-0.08
Conjunctions	-1.24	118.64	.217	-0.55	0.44	-1.43	0.33
Negations	-1.60	163.81	.111	-0.30	0.18	-0.66	0.07
Verbs	-1.98	123.36	.051	-1.24	0.63	-2.48	0.00
Adjectives	-1.87	142.05	.064	-0.82	0.44	-1.69	0.05
Comparisons	-1.58	150.00	.117	-0.57	0.36	-1.29	0.15
Interrogative words	-1.37	143.74	.172	-0.27	0.19	-0.65	0.12
Numbers	0.06	189.88	.955	0.01	0.19	-0.36	0.38
Quantifiers	-0.37	104.68	.716	-0.14	0.38	-0.88	0.61
Period	-2.17	118.67	.026	-0.74	0.34	-1.42	-0.07
Comma	1.99	106.86	.034	0.81	0.40	0.00	1.61

From the theme analysis matrix (see Table 4), we can see how students perceived their experience. The positive narrative students tended to signify both the social interactions they had, as well as their effort and achievement. Meanwhile, the focus of negative narrative students was on social interactions, even if they were content about effort and achievement; those focuses were usually associated with the little support they got as well. Lastly, the third group—the ambivalent narrative students—focused on the negative part of the social interaction and positive part of the effort and achievement, excluding the feeling of pride.

Table 4.Theme analysis matrix

Categories	Theme 1: Social Interaction	Theme 2: Effort and Achievement
Positive Narratives	Meeting new people from different backgrounds, learning to cooperate with people.	The school cultivates their passion and interests. Proud to be a part of the school. Becoming a more skilled individual.
Negative Narratives	Feeling rejected, left behind, and not fitting in. Distrusting of everyone, everyone is for him/herself. Lecturers are not supportive of their needs (and those who needs extra assistance).	Not supported in their effort to reach their full potential.
Ambivalent Narratives	Feeling rejected and unsupported.	Passion and interest fitness as well as skills, **but not pride.**

Nevertheless, despite understandable writing, there were some common grammatical errors found, such as unneeded articles, tenses, and pronoun forms. The most common error found was the use of excessive articles such as adding '*a*' or '*the*' before words or phrases not needing any (e.g.: a books). It was followed by incoherency of tenses, such using *–ing* verbs after auxiliary verbs (e.g. I would feeling); and inaccurate pronoun forms, such the use of objective pronouns as subject (e.g. you and me will go, or he and her should.)

DISCUSSION
There will be three major points of discussions provided in this section. First, we are going to discuss the meaning of results shown previously. In order to do so, we need to remember that both writing capacity and profile cannot be interpreted in isolation to the general population. This narrow focus means, most of our claims we made are inferred in contrast to the expressive writing data of LIWC2015. Following that, we are going to try to explain male and female differences in writing style. Lastly, we are going to elaborate our findings using the content of those narratives to see its potential implications. Across all of these points of discussions, we also use the content analysis to support our main data. We are also going to conclude our findings and suggest the directions for future studies.

Sample's writing profile
Writing quantity and quality
As seen in Table 2, there were a lot of significant differences between the global sample and ours. Arguably, the most significant difference can be seen on the *word counts* category in which our subjects didn't even write half of LIWC2015's. Taking it at face value, we concluded that these students were deficient at written communication due to the minimalistic *word counts*. Regardless of being unable or unwilling to narrate their thoughts, they simply didn't write enough to explain their arguments clearly. In this case, given the new perspective of literacy—which includes both *ability* and *intent* on critical delivery of information (Freire & Macedo, 2005*;* Luke & Dooley, 2011; Luke et al., 2011)—we could also conclude that these samples are deficient.

Of course, initially, we could assume that they simply wrote less because they are not fluent in English. However, should we take a look at the *six letter words* mean, the numbers of *six letter words* per participants in our sample is significantly higher than in LIWC2015—although LIWC2015's data wasn't specified on English. This means that our sample did know more sophisticated English words, suggesting they are more fluent than we initially thought, though we still need to justify the low *word counts*. This claim is also supported by the narrative's quality. Regarding the grammatical quality of the narratives, subject had the tendencies to use articles and auxiliary verbs when unneeded or omitting those when needed. Mistakes such as those are commonly associated with lacking exercise (see Bybee, 2006; Maros, Tan, & Salehuddin, 2007; Tajeddin Alemi, & Pashmforoosh, 2017).

That being said, we are left with only one possible explanation. These students were simply reluctant to write. Unfortunately, such a conclusion is not necessarily enough to answer the problem of students' written communication we are facing in the Indonesian education system. The first thing we need to explore here is why these students seemed reluctant to write. Second, we need to know how pervasive this problem is nationwide.

On the first problem, we had to address the possibility that the task was irrelevant to the students; hence they weren't invested in answering it in detail. As we all know, task relevance is an important factor on individuals' actions (see Assor, Kaplan, & Roth, 2002;

Zarei, Pourghasemian, & Jalali, 2016). For example, when a student does not feel that a particular class is relevant to their lives, they tend to lose interest and eventually become disengaged. In this case, there was a chance that these individuals didn't see any benefit of writing task; hence, they ignored it altogether.

However, because do not have any additional data aside from common complains and critiques, we weren't able to offer more than speculations on the latter problem. Assuming that most educators are somewhat certain that most students are too lazy to write, we are to ask whether we are lazy or simply disinterested in literacy. It is vital to know which reason is the case as the effort to address this concern would be different. If students were simply disinterested, doing writing and reading more interesting will be enough (e.g., McCormick & Mason, 1984; Hidi, 2001). For example, this can be done by making literacy more challenging and fun (Mori, 2002), or increasing students' efficacy (Serap Kurbanoglu, 2003), for examples. Meanwhile, it is slightly tricky to change laziness-based behaviours, as, most often, changing these kinds of behaviours requires a reward-punishment mechanism (Reyna & Weiner, 2001; Thompson, 2003).

Potential psychological implications
Moving on from capability and willingness, another interesting finding can be seen in the use of pronouns, especially personal pronouns. Our sample tended to use significantly few personal pronouns in general, but in proportion, they significantly used a lot more *I-pronouns* than other pronouns. Although the task was rather specific on their experience—increasing the tendency to use *I-pronoun*—we have reasons to flag their social tendency; as the use of more self-references such this signified higher focus on self (Raskin & Shaw, 1988; Brockmeyer et al., 2015).

It is expected that these participants, as Indonesians who are culturally more collective, would utilize more *non-I-pronouns* suggesting their focus on social relationships. We thought that the collective culture would make other roles in their study more prominent. For example, they might have talked more about their friends, family, lecturers, and so on. We found the exact opposite, and there are two speculations we could take from this result. First, there is a possibility of personality change following language change as argued in previous studies finding activated cultural frame switching for some personality traits (e.g. Ramirez-Esparza, Gosling, Benet-Martínez, Potter, & Pannebaker, 2006). The other possibility is that these individuals simply liked to talk about themselves more and potentially disregarded others. In another word, it is possible that they could be rather narcissistic (see Sandler, Person, & Fonagy, 1991; Campbell & Foster, 2007; Twenge & Campbell, 2009).

Of course, using this set of data alone, we were not able to find which possibility is more likely to have happened. However, should the latter do occur—which is probable if we take a look at the *word counts* and

other grammatical categories (such verbs, adverbs, and adjectives)—it might suggest its implications in education.

As shown earlier, there were significant differences in *verbs* and *adjectives* categories, but not in *adverbs*. While students tended to use fewer verbs, they used significantly more adjectives, indicating their concern on the qualities of things or nouns. This result is rather expected as Indonesians are often more focused on how something is perceived. Additionally, we cannot help but notice that our sample's *comparisons* category is also significantly higher than LIWC2015. We also found a significant correlation between the two (r=.756, p<.005), indicating the use of relative adjectives (such: good-better-best, etc.). This would strengthen our previous presumption that there is a narcissistic tendency in our particular samples. The logic of this argument lays on the very characteristic of narcissism itself that one is essentially more (e.g., smarter, prettier, special, gifted, and such) and other people are essentially less (see Bartlett, 2017).

This particular claim seems to be supported by some of the students' narrative contents in which they signified their achievements while seemingly blamed others for being not supportive enough. This is consistent with some studies suggesting narcissistic individuals' tendency on external-attribution for failure (e.g., Rhodewalt & Morf, 1998). These narratives also expressed their beliefs on how special it is to be part of a prestigious community. Again, it is consistent with how classical narcissists signify their involvements with prestigious objects such as other people and community because these objects provide justifications for feeling special (Cheng, Tracy, & Henrich, 2010). However, we have to acknowledge that we cannot claim this as definitive proof of students' narcissistic tendency.

We could, however, validate the sociability presumption in the collectivism context using theme analysis. It's been proven that these students held their relationship-oriented value quite dearly—one main indicator of collectivism (see Hofstede, 1984; Oyserman & Lee, 2008). In general, students' perceptions toward the program were varied, although their main concerns were quite the same. Even in the second theme—effort and achievement—the impact of others was still visible, such us pride to be a part of the school and gaining support to be successful. Should we look at the ambivalent narratives, we could see how these individuals longed for more meaningful social interactions despite their achievement needs being fulfilled.

Gender differences in writing
As mentioned earlier, our findings on gender differences were completely unintentional. We did consider the probability, as many studies found that men and women's verbal capacity tend to be different (e.g., Coates, 2015). Hence we conducted an independent t-test comparing the two gender. It's been previously found that gender differences in language were more

prominent in tasks with less constraint (see Newman, Groom, & Handelman., 2008). Hence, it is expected that such differences would be evident in our sample as we had asked them to freely write about their experiences. What we did not expect was that these differences were found in many categories we found difficult to explain. For example, we did expect that if male and female were different; there would be a significant discrepancy in *word counts* between the two groups and that women would have more *six-letter words*.

We thought so because women were thought to be more communicative and advanced in verbal ability (e.g., Burton, Henninger, & Hafetz, 2005). Instead, we found no difference in *word counts* (*mean difference = -9.64 , p=.609*) and men actually outperformed women in *six-letter words* (*mean difference = 1.66 , p=.027*) meaning men use more complex words than women. We cannot, however, determine if the use of more six-letter words was based on their advance language capacity or simply their linguistic style. That being said, we would presume that if using more difficult words were simply men's linguistic style, it would support our narcissistic claims; as men, in general, are more narcissistic than women (see Stinson et al., 2008). Meanwhile, narcissistic individuals tend to present themselves as more sophisticated due to their grandiose needs (see Behary, 2013).

Men also provided more commas (*mean difference = .81, p = .034*) and longer sentences while women used more periods (*mean difference = -.74, p = .026*) and shorter sentences. These findings are quite consistent with some other studies stating men tend to use fewer periods or make more period-related errors (Wilcox, Yagelski, & Yu, 2014). They also suggested that the use of fewer periods was often associated with diminished clarity of the sentences. Additionally, we also found that women significantly used more adverbs and auxiliary verbs. It suggested that women tended to elaborate certain quality of actions and cared more for tenses and moods in communication.

CONCLUSIONS, IMPLICATIONS, AND FUTURE STUDIES

Based on the previous points of discussion, there are three major points to conclude and elaborate in this section. First, we could conclude that students were able to write, but they were most likely unwilling to do so. That being said, we need to explore further why students might be unwilling to write and how pervasive this problem actually is. It is crucial to untangle this knot because its implication on the quality of our education system and later on our competitiveness as a nation will be on the line.

In the hope of answering these questions, we suggest an increase in studies of students' contextual writing. As mentioned earlier, we need to know if the minimalistic narrative was the result of an irrelevant task. Hence, we could test if the task was relevant—for example, it would be graded—maybe subjects would put more efforts into the writing samples. We strongly urge researchers to readdress the possibility of students' struggle in writing—especially in the context of second language usage. Although our sample suggesting otherwise, we believed that it is still a possibility that students are proficient to write, especially in English. Their grammatical mistakes indicated lacking exercise and/or they do not read enough. We also need to conduct studies with a lot more sample to answer our questions of the pervasiveness of our findings. Such studies are also expected to explore the same conditions in Indonesian writing; as its discrepancy would provide us with enough data regarding our readiness for global competition.

Second, we believe that it is important to readdress our presumptions regarding the narcissistic tendency. Following the content analysis, we found that in general, participants tend to write regarding how they felt and what they had accomplished. Taking the writing task into consideration, we believed that at the moment it wouldn't be fair to make a conclusion on this question. That being said, we suggest researchers undertake more studies on narcissism and its related constructs using multiple methods in this particular sample and beyond.

Third, we found that men and women tend to be different in their expressive writing. In spite of that, we believe that it would be wise to study more on the differences between men and women in both verbal and written communication. For example, we can study which group might be more effective communicators and what that group has to teach the other.

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