The Impact of Personality: Extrovert vs. Introvert on the Ability in Syntax in Essay Writing

Zainuddin*

Universitas Negeri Medan, Medan, INDONESIA

Abstract
The main purpose of this study was to find out if there would be any significant difference in scores for syntax in essay writing between extrovert and introvert EFL learners. The quantitative data were collected by applying writing rubrics from Brown (2007). The participants of this study were 40 English learners (20 extroverts and 20 introverts) at Universitas Negeri Medan, Indonesia. The data were analyzed by using Statistical Package for the Social Sciences (SPSS) version 2.0. The findings of this study indicated that there was a significant difference in the scores for syntax between extrovert and introvert learners. In this study, introvert EFL learners did better than extrovert EFL learners in constructing sentences (syntax). Thus, both groups still have an equal chance to improve their ability in a learning foreign language particularly in writing skills but extrovert EFL learners must pay more attention to using good syntax because they tend to be careless and less correct in constructing their phrases when doing a writing task.

Keywords: Writing, syntax, personality traits.

1. INTRODUCTION

Skill at writing is very important for English learners because it is an excellent tool for communication. Through writing, everyone can freely relay ideas, announcements and even feelings to others. Sharples (1999) virtually stated that skill in writing is a required skill; it provides freedom for each student to express his/her ideas in words. In addition, students are able to elaborate their ideas effectively and accurately in a proper way through their writing skills. Besides that, students are able to convey their opinions or ideas by arranging them into a structured text so that others can easily comprehend the opinions and ideas of each student. Furthermore, many
people declare that writing is an effective and efficient way to convey news to another person or business entity: personal letters, business letters, business reports and academic reports.

Moreover, essay writing is a language skill, which is a set of sentences formed with logical syntactic structure in combinations of paragraphs (Chomsky, 1957). Furthermore, Finch (2000) has argued that languages like English deal with word order, however some other languages form the words per se. Meanwhile, Chomsky’s (1965) Universal Grammar (UG) stated that all languages share common basic features. Borsley (1999) has discussed that the problems of syntax are outstanding due to the fact that languages do not have ‘clear cut objectives’. Moreover, “syntax is a term used for the study of rules governing the way words are combined to form sentences” (Finch, 2000, p. 77). Similarly, Bell (1991, p. 207) states “syntax is the knowledge of manipulating sentence elements in the chain and choice of the system within the proposition semantic aspect”. He continues to define syntactic knowledge as a “matter of knowing what elements exist in a language and how they may be legitimately combined”.

Literally, writing is a brain activity that needs memory, accuracy, and skills to combine the words in accordance with the accepted language rules and customs (Deporter & Heracki, 2002). On doing writing activities, it is possible that extrovert and introvert EFL learners may have different outcomes because extroverts act more quickly but less correctly in compound cognitive tasks such as writing, while introverts are slower but more precise (Eysenck & Eysenck, 1985).

Additionally, since writing is one of the skills that have to be mastered by EFL learners for competence and performance, there could be a correlation between the personality type of a student and their writing competence and performance. What could be given attention for second or foreign language research about personality type are the differences due to extroversion and introversion (Dörnyei, 2005). Basically, introvert and extrovert learners are able to learn and work together if the lecturers/teachers help and facilitate their communication and give both equal opportunities to take part (Celce-Murcia, 2001).

Therefore, this study focused on the correlation between personality traits (extrovert and introvert) and the writing skills of EFL learners. The main objective of this study was to investigate to what extent extrovert and introvert EFL learners made syntactic errors when they wrote an essay. Furthermore, the research question was formulated as below:

- Are there any significant differences in the syntactic errors in essays written by extrovert and by introvert EFL learners?

2. LITERATURE REVIEW

2.1 Personality Traits

Each individual person is a unique character with their own distinctive personality (John, Hampson & Goldberg, 1991; McAdams, 1995). Personality symbolizes the
implicit interrelations among noticeable behaviors, internal dispositions and preferences to act (Haradast & Baradan, 2013). These alliances portray the individual’s unchanging patterns of behavior and describe dissimilarity between rather than within individuals. This in turn may be at the head of the various types of sense, line of thought, and behavior in dissimilar ways and among different people. Furthermore, personality can be defined in two different ways: 1) characterization and individuality, or as 2) the subjective structure that brings out the characteristics of a person (Boyle, Mathews & Saklofske, 2008).

2.1.1 Extrovert

Extroversion is the dimension where a person has a fundamental need to project a strong self-image for self-esteem and a sense of completeness from others (Brown, 2000). Additionally, according to Eysenck and Eysenck (1975, p. 6) “the typical extrovert is friendly, has many friends, needs to get friends to speak to, likes parties, and avoids reading or studying by himself”. Additionally, an extrovert person wishes for excitement, takes opportunities, often pushes his neck out, takes action on a short stimulus and is normally impetuous. He often has an empirical funny story, can always provide an organized answer, and normally likes change. He is usually unworried, broad-minded, hopeful, and confident and lives to “laugh and be merry”.

2.1.2 Introvert

Introversion is the extent to which a person can derive a sense of wholeness and fulfillment on their own without reflection of themselves from other people (Brown, 2000). According to Naik (2010), introverts are more fascinated by activities like writing, reading and drawing than in activities which require them to act in an outgoing way like speaking, gossiping and so on. In addition, Richards and Schmidt (2002) stated that an introvert person prefers to avoid societal contact with others and is often obsessed with his/her experiences, thoughts, and feelings. Besides that, according to Eysenck and Eysenck (1975, p. 6), “the introvert is typically a silent, withdrawn sort of person, self-analyzing, likes books rather than people; he is uncommunicative and faraway except with close friends”.

2.2 Extroversion/Introversion and Anxiety

Lieberman (2000) explains that extroverts are less sensitive to punishment signals, so, their insensitivity and their under-arousal condition make them to be more stress-resistant while introverts have a higher level of neurotransmitter dopamine. Dopamine plays the important role of controlling movements or the ability to move, learning, working memory, cognition, and emotion. Introverts already have a higher level of dopamine, so they require less to not be very high or very low in order to make them relaxed without stress or depression (Laney, 2002).

Some psychologists believe that impulsive individuals are freer and do better under highly stressful circumstances (Revelle, 1997). However, Eysenck and Eysenck (1985) believe that extroverts act more quickly but less correctly when doing compound cognitive tasks, while introverts perhaps are slower but are more precise. Introverts’
apprehension of punishment makes them more cautious to act more carefully. Therefore, they are more likely to be more precise when using linguistic forms.

2.3 Extroversion/Introversion and Brain Processing

Studies show that the brains of extrovert and introvert EFL learners operate differently. According to Laney (2002), the introverts’ brain pathways are longer and more complicated than those of extroverts. This difference in the brain passageways determines the central brain behaviors of extroverts and introverts. According to Laney (2002, p. 70), “…the behavioral differences between introverts and extroverts result from using different brain pathways that influence where we direct our focus internally or externally”. Extroverts work better under stressful situations than introverts. Stress releases additional dopamine, which impairs optimal stimulation in the dorsolateral prefrontal cortex and weakens the Working Memory (WM) and intentional processes (Lieberman & Rosenthal, 2001). This difference in the neurological systems of extroverts and introverts can be an explanation for why extroverts work better with their Short-Term Memory (STM; active memory) and WM than introverts (Lieberman, 2000).

Dewaele (2012) said that introverts have less STM capacity and that their reduced STM capacity in the L2 domain means that the linguistic information units would have to be lined up before being processed which slows down the language proficiency and brain processing linguistic pathways. He also believes that the combination of extroverts’ speed of retrieval of information from memory and their higher degree of physiological stress resistance would explain their better performance in high stimulation environments such as a foreign language classroom (Dewaele, 2012). Since extroverts are hypothesized to have better STM, introverts are believed to possess a wider Long-Term Memory (LTM) and perform better in learning and memorizing the rules for linguistics for a foreign language due to their better LTM and concentration than extroverts (Eysenck & Eysenck, 1985).

2.4 Syntax

Fromkin, Rodman and Hyams (2011, p. 78) define syntax as follows: “syntax is the component of grammar that stands for a producer’s knowledge of phrase, clause and sentences, and their structures”. The rules of syntax integrate words into phrases then to sentences then to paragraphs. This definition is similar to Aarts (2001). He stated that syntax is the part of grammar that concerns itself with the structure of sentences. Furthermore, Finch, (2000) stated that syntax is a term used for the study of rules governing the way words are combined to form phrases.

2.4.1 X-Bar Theory

According to Chomsky (1995), X-Bar Theory describes the structure of phrases, clauses and sentences whatever the order of language may have adopted SVO, VSO or OVS. Furthermore, X-bar theory or X-Bar syntax is the arrangement of principles that explain how any particular constituent phrase can be structured internally (the way it is ultimately constructed will be based on the head choice (Koopman, Sportiche &
Stabler, 2013). Every phrase has complements in its construction, which act as the construction head. Consequently, X is the construction head XP. The construction head is X, the classification instantly above it is X-Bar and the classification above X-Bar is X-Double Bar. Hence, the general tree for X-Bar Theory that is called the Cross-Categorial Generalization is as follows:

![Cross-Categorial Generalization](image)

Figure 1. Cross-Categorial Generalization.

Figure 1 embodies the general rules of English X-Bar theory which is part of X-bar syntax. Notice that the labels Specifier, Adjunct, Head and Complement are functional notions, and that of these four only the Head is always obligatory. Koopman, Sportiche and Stabler (2013) and Aarts (2001) have asserted that the head determines the fundamental properties of the complex. The specifier is a determiner of the phrase, which appears only if the meaning of the phrase requires it. A complement appears only if the head of the phrase requires its presence. An adjunct is usually a modifier for the verb.

3. RESEARCH METHODOLOGY

3.1 Participants of the Study

This study was conducted with 20 extrovert and 20 introvert EFL learners from the English Education Study Program at Universitas Negeri Medan, in Medan, Indonesia. The range of their ages was between 18 and 22. Hence, the total numbers of participants were 40 university students specially selected from 182 students.

3.2 Materials

The questionnaire of Myers Briggs Types Indicator (MBTI) was created and developed by Myers and Briggs in 1998. This questionnaire consisted of 70 questions. Actually, the MBTI personality traits questionnaire was used to measure the personality of the students on extroversion - introversion scale. Based on these results, the sample students were chosen by random sampling.

A composition test, or an essay test, was administered to both the extrovert and the introvert sample groups. The test asked each student to write an essay of at least 250
words. The topic of the writing test was to describe a person with the title “My Best Friend”.

3.3 Research Procedures

In step one, the selected homogenous students were asked to fill in the MBTI questionnaire within 15 minutes. With a brief time interval after filling in the questionnaire, the students were given a situational writing task on a specific topic in order to write one essay composition within the fixed time of 60 minutes. Then, in step two, 20 of the most extrovert learners and 20 of the most introvert learners were selected to do the essay writing test. Finally, step three, the 20 essays from the extroverts and the 20 essays from the introverts were scored using a writing rubric (Brown, 2007). The scores were tabulated and analyzed with SPSS to find out if there was any significant difference between the scores from the extrovert and the introvert learners.

4. FINDINGS AND DISCUSSION

4.1 Syntax Qualities of the Extrovert and Introvert Students’ Essay Writings

The scores for syntax from the writing rubric used in this study were from zero (0) to 12. However, the levels of these qualities from Universitas Negeri Medan (UNIMED) are divided into four (4) levels of achievement, namely “A” (Very Good), “B” (Good), “C” (Enough) and “E” (Failed). Therefore, the syntax scores from the rubric were transformed to scores from 0-100 since the level of qualities in UNIMED requires this type of score. The results from the data are presented in Table 1.

<table>
<thead>
<tr>
<th>Personality</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introvert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A = Very Good</td>
<td>7</td>
<td>17.5</td>
</tr>
<tr>
<td>B = Good</td>
<td>19</td>
<td>47.5</td>
</tr>
<tr>
<td>C = Enough</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>E = Failed</td>
<td>13</td>
<td>32.5</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100.0</td>
</tr>
<tr>
<td>Extrovert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C = Enough</td>
<td>4</td>
<td>10.0</td>
</tr>
<tr>
<td>E = Failed</td>
<td>36</td>
<td>90.0</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 1. The syntax scores from writing tests done by the introverts and the extroverts.

Table 1 shows the frequency and percentage for each syntax quality from the introvert group and the extrovert group. The score variance from the introvert group was larger than that from the extrovert group. The introvert group had all four levels of qualities while the extrovert group had only two lower levels. The highest number in the introvert group was “B = Good” level which had 19 students at this level. Hence, there were 19 (47.5 %) from the 40 students who got a score between 80 and 89 out of 100. By contrast, none of the extrovert group reached this score. Furthermore, the second largest sub-group from the introvert group was the “E = Failed” level which had 13 students. Thus there were 32.5% from the 40 introvert students who did not pass the
By comparison, this level had the highest number from the extrovert group, with 36 students. Thus, 90% from the 40 extrovert students did not pass the test based on syntax. Even though the number from the extrovert group who scored “E = Failed” level was higher than the number from the introvert group, both of these numbers were still high and need to be decreased. The next level up was “C = Enough” level. The introvert group had only (one) 1 student at this level while the extrovert group had four (4) students. The highest level is the “A = Very Good” level. This level was only reached by (seven) 7 introvert students; in contrast none of the extrovert students attained this level. Hence, 17.5% from the 40 introvert students reached the “A” level, while zero (0%) % from the extrovert students got to this level.

4.2 Extrovert vs. Introvert EFL Learners in Terms of Their Syntax Scores in Essay Writing

The scores for syntax from the two groups were analyzed by using the independent sample t-test to see if there was a significant difference. It was applied to compare the scores from the extrovert and the introvert EFL learners in terms of their ability in constructing sentences. The comparison is set out in Table 2 below.

Table 2. Results from the syntax test scores from introvert and extrovert EFL learners.

<table>
<thead>
<tr>
<th>Personality</th>
<th>No</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syntax</td>
<td>Introvert</td>
<td>40</td>
<td>9.475</td>
<td>1.364</td>
</tr>
<tr>
<td></td>
<td>Extrovert</td>
<td>40</td>
<td>7.492</td>
<td>.806</td>
</tr>
</tbody>
</table>

Table 2 above sets out the values for the means and the standard deviations along with the standard error of the means for the syntax scores of the two groups. The mean score of the introvert EFL learners was 1.983 points higher than the mean score of the extrovert EFL learners. Based on that, there was a significant difference between the extrovert group and the introvert group in terms of their ability at constructing phrases and sentences in writing an essay.

This research was specifically aimed at examining any significant difference in the scores for syntax between extrovert EFL learners and introvert EFL learners in EESP at UNIMED and the comparison is clearly shown in Figure 2.

![Figure 2. Comparison of mean syntax scores between the introvert and extrovert groups.](image-url)
Figure 2 shows the comparison of the mean syntax scores from the extrovert group with those from the introvert group. It illustrates the difference between the extrovert group and the introvert group. However, it does not present the value of significant difference between these two (2) groups. Therefore, to examine the value of the significant difference between the introvert group and the extrovert group, the data were computed by using the independent sample t-test. The result of the test is shown in Table 3.

| Table 3. Independent sample t-test for syntax scores of extrovert and introvert learners. |
|---------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| Syntax Score                               | Equal variances assumed | Equal variances not assumed                     |
| Levene’s Test for Equality of Variances     | F 16.829                 |                                               |
| Sig.                                        | .000                       |                                               |
| t-test for Equality of Means                | T 7.913                    | 7.913                                         |
| Df                                          | 78                          | 63.262                                        |
| Sig. (2-tailed)                             | .000                        | .000                                          |

An independent-samples t-test was conducted to compare the syntax scores between the extrovert group and the introvert group. The test found that Levene’s test for equality of variances was found to be violated for the present analysis, F = 16.83, p ≤ .05. Owing to this violated assumption, a “t” statistic not assuming homogeneity of variance was computed. Moreover, this test was found to be statistically significant, t (78) = 7.931, p ≤ .05. These results show that there was a significant difference between the extrovert and the introvert groups in terms of syntax quality.

Moreover, the findings can be analyzed in another way; thus, the view that the extrovert group are good learners due to their sociable behavior in class is misleading. Unfortunately, since extrovert EFL learners are more active and tend to talk in class, the majority of teachers’ concepts and judgments about extrovert learners have been affected (Brown, 2007). In the EFL teaching-learning process nowadays, speaking skills tend to be more dominant than other skills. Consequently, students who volunteer to speak in class are considered as good, active learners. On the other hand, students who tend to be silent in the class can be judged as poor, passive learners. Therefore, the findings of this current study illuminate this problem and confirm that the extroverts are not always better than the introverts since in these present research findings, the introvert group outperformed the extrovert group in the test of syntax ability.

4.3 Discussion

The findings of this current study appear to disagree with findings in studies by Karami (2001) and Marimoto (2006) where both of them reported that there was no significant relationship between extroversion/introversion and accuracy in constructing sentences. They are also contrary to the findings of Vaezi and Kafshgar (2012), which found no significant relationship between the personalities of extrovert and introvert and syntax accuracy. Thus, the findings of this recent research are contradictory to the views of some other linguists and psychologists at least regarding linguistic features such as syntax.
These research findings are also very much in contrast to the findings of previous researchers who reported that extroverts are better than introverts in second language learning and acquisition such as Sharp (2004) and Dewaele (2012). Furthermore, this current study totally disagrees with the previous researchers who claimed that there is no significant difference between extroverts and introverts in second language learning such as Marefat (2006) and Nezhad, Jahandar and Khodabandehlou (2014).

However, these research findings agree with those from the psychologists Eysenck and Eysenck (1985) who claimed that although extroverts are hypothesized to have better short term memory, introverts are believed to possess a larger long term memory and perform better in learning foreign languages due to better long term memory and concentration on accuracy compared to extroverts. Thus, this study is also in line with Eysenck and Eysenck (1985) who believed that extroverts act more quickly but less correctly in compound cognitive tasks, whereas introverts are slower but more precise. Introverts tend to be more careful and act more precisely in using linguistic forms. These research findings are also in line with the findings from some previous researchers such as Callahan (2000) and Ellis (2008) who reported that introvert EFL learners outperformed the extrovert EFL learners in terms of composition tasks.

In conclusion, this study has found that there was a significant difference between extrovert EFL learners and introvert EFL learners in the accuracy of constructing sentences. It presents a clear answer to the previous mixed results in this area and increases the role of personality in language proficiency, particularly writing. Therefore, the extrovert group and introvert group are not at the same level of proficiency in terms of their syntax accuracy in the administered writing test especially a descriptive text test. Such a result answers the research question and agrees with previous scholars who have reported that introvert EFL learners are slower but more precise than extrovert EFL learners in terms of cognitive tasks.

5. CONCLUSION AND IMPLICATION

According to the results and discussions, the findings show that extrovert EFL learners did worse than introvert EFL learners in language construction for essay writing. Even though there was a significant difference between the extroverts and the introverts in performing the writing task, actually both groups still have an equal chance to improve their ability in learning foreign language particularly in writing skills but extrovert EFL learners must pay more attention to using good syntax because they tend to be careless and less correct in constructing their phrases when doing a writing task.

The implications of this study can provide teachers, educators, parents of students and syllabus designers a proper answer to their prejudgments about the students’ ability in writing skills. This study also gives more information about contradictory ideologies concerned with individual differences in language learning. Additionally, every student can reach her optimal level of performance but she has to be more aggressive to master her weaknesses and use her strengths. Hence, she will know how to solve her own problems in terms of language learning because the personality of learners may contribute to differences in language skills.
REFERENCES


[Received 19 July 2016; revised 19 August 2016; accepted 30 August 2016]

THE AUTHOR

**Dr. Zainuddin, M.Hum.** is a senior lecturer of English language at the Faculty of Languages and Arts (Fakultas Bahasa dan Seni) in State University of Medan (Universitas Negri Medan or Unimed). He is also an English lecturer at the English Applied Linguistics Study Program (Linguistik Terapan Bahasa Ingris or LTBI), Postgraduate School at the same university 2013. In 1986, he got a scholarship from the
International Development Program (IDP) to study in Australia at the Sydney University for the program of Diploma in the Teaching of English as foreign language (Dip. TEFL Program). Since then, he has been involved as a life member of IDP Association of Australian Universities and Colleges.