

TEACHING METHODS, PERSONALITY TYPES, AND READING COMPREHENSION

ANDHI DWI NUGROHO

Universitas Sarjanawiyata Tamansiswa

e-mail: andhidn@ustjogja.ac.id

Abstract

The primary aimed of this study was to provide the empirical and theoretical evidence for the effect of teaching methods and personality types on reading comprehension. This quassi experimental study involved 100 students under investigation, which were determined randomly through multistage random sampling technique. The results of the research indicate that there was an interaction effect between the teaching methods and personality types on the reading comprehension; there was no significant difference in the reading comprehension between the group of students who learn using Cooperative Integrated Reading and Composition (CIRC) and those who learn using Problem Based Instruction (PBI); the students' reading comprehension having extrovert personality was better than those having introvert personality; the students' reading comprehension having extrovert personality who learn using CIRC is higher than those who learn using PBI; and the students' reading comprehension having introvert personality who learn using the CIRC is lower than those who learn using PBI.

Keywords: teaching methods, personality types, reading comprehension

Introduction

Reading opens the path of getting knowledge and becomes the input in EFL learning. It involves an interaction between readers' thought and language it self. Harris & Hodges (1995) views reading comprehension as intentional thinking during which meaning is constructed through text and reader. Several studies view reading as a dynamic process. Grabe (1997) states reading comprehension as the activity of reconstructing a reasonable spoken message from written symbols to a form of language, which a person can understand. It is an important skill for most language learner to develop, especially for EFL learners. Reading covers the integrations of bottom-up processing which is text driven and top-bottom processing which is concept driven.

Dealing with the bottom-up and top-down processing in reading comprehension, the teaching methods namely Cooperative Integrated Reading and Composition (CIRC) and Problem Based Instruction (PBI) involved both processes in the activities. CIRC is derived from cooperative learning which facilitates the learners to comprehend the reading text given more easily. The learners are working together within the groups to achieve the reading objectives. Slavin (1995) elaborates the each group consists of two learners of high reading pair and two others of low reading group. The learners work in pairs within their groups on a series of cognitively engaging activities, including partner reading (reading to each other), making prediction, identifying of ideas, making inference, summarizing, finding meaning of vocabulary, and accomplishing comprehension exercises. Meanwhile, PBI is an instructional (and curricular) learner-centered approach that empowers learners to conduct research, integrates theory and practice, and applies knowledge and skills to develop a viable solution to a defined problem. Critical to the success of the approach is the selection of ill-structured problems (often interdisciplinary). A tutor guides the learning process and conducts a through debriefing at the conclusion of the learning experience. Two previous studies have described the characteristics and features required for a Problem Based Learning (PBL) approach to Problem Based Instruction. Boud & Feletti (1997) presents a list of practices related to the characteristics of the philosophy, strategies, and tactics of problem-based instruction. In line with this, Duch, Groh, & Allen (2001) further elaborate the details in PBI and the specific skills developed, including the ability to think critically, analyze and solve complex, real-world problems, to find, evaluate, and use appropriate learning resources; to work cooperatively, to demonstrate effective communication skills, and to use content knowledge and intellectual skills to become continual learners. Learners are regarded as engaged problem solvers, seeking to identify the root problem and the conditions needed for a good solution and in the process becoming self-directed learners.

In terms of EFL learning, there are factors involved in its success. Kumaravadivelu (2006) elaborates individual factors affecting EFL development.

Among those factors are age, anxiety, empathy, extroversion, introversion, and risk taking. The study focuses on the attitudes of extroversion and introversion. The way how extrovert and introvert react can influence the process of language learning and the level of success. Cloninger (1993) explains extroversion and introversion are two fundamental attitudes. Introversion is more oriented to the inner world, while extroversion is oriented more to the external realities. Aiken (1994) points out extrovert is an individual who orientates his thought and social life toward external environment and surroundings, while introvert orientates more on the individuality, more concerned with personal thought and feeling rather than the environment and others. According to Lanyon & Goodstein (1982); De Hoogh, Den Hartog, & Koopman (2005); and Cain (2012), 'extroversion-introversion' has four reverse characteristics, namely (a) talkative - silent, (b) frank, open - secretive, (c) adventurous - cautious, and (d) sociable - reclusive. Therefore, extrovert and introvert personalities are contradictory. Extrovert personality is more open, frank, adventurous, and sociable; on the other hand, introvert personality is more silent (solitary), secretive, cautious, and reclusive.

Thus, this study investigates the two teaching methods which are CIRC and PBI viewed from learners' personality types. This study attempts to answer; (1) whether there is any interaction between the teaching methods and personality types on the learners reading comprehension, (2) whether there is any significant difference in reading comprehension between the group of students who learn using CIRC and those who learn using PBI, (3) whether there is any significant difference in reading comprehension between the group of students having extrovert personality and those having introvert personality, (4) whether there is any significant difference in reading comprehension between the group of students having extrovert personality who learn using CIRC and those of the same group who learn using PBI, and (5) whether there is any significant difference in reading comprehension between the group of students having introvert personality who learn using CIRC and those of the same group who learn using PBI.

RESEARCH METHOD

This study was intended to obtain empirical findings on the effect of teaching methods and personality types towards the students' reading comprehension. It was carried out at the private university in Yogyakarta for six months starting from July until December 2018 with the total number of 8 meeting sessions.

The research method was quassi-experimental and factorial design was implemented, in which treatments were assigned to two different groups as the samples of research. The two groups were then randomly determined as either an experimental group or a control group. The experimental group was given CIRC as the treatment, while the control group was PBI. The other independent variable tested in this study was personality type which focused on extroversion and introversion. In short, the first independent variable was the teaching methods, while the second independent variable was personality types regarded as the attributive or control variable. Hence, this research used a 2 x 2 factorial design.

From 484 students belonging to the first year to fourth year, multi stage random sampling technique was employed to select an appropriate number of samples. The result of the randomization determined class A, which consisted of 50, students as the experimental group (treated with CIRC), while class B, which consisted of 50 students, as the control group (treated with PBI).

The scores from their personality questionnaires were then used to determine either 30% high to be the extrovert group or 30% low to be the introvert group. The total number of students in either extrovert group or introvert group was 15 students respectively. The instruments used to collect the data were of two types: (1) reading test which was meant to measure the effect of the teaching methods on the students' reading comprehension, and (2) questionnaire which was used to determine the students' personality types. The instruments for the tests were tried out in advanced. For the reading test, the validity was analyzed using Coefficient Correlation Point Biserial and its reliability was measured using KR-20. Meanwhile, for the personality questionnaire, the validity was analyzed using Coefficient Correlation Product Moment and its reliability was measured using Alpha Cronbach.

The collected data were then analyzed in two ways, descriptive statistics and inferential statistics. The mean score gained from descriptive statistics analysis from each group was described and compared. The inferential statistics analysis was carried out using a two-way analysis of variance (ANOVA) at the level of significance $\alpha = 0.05$ to determine the effect of independent variables on the dependent variable. Further analysis using multiple-comparison procedure (Post Hoc Multiple Comparison) was applied to determine which pairs or combinations of mean scores differed. Based on the fact that the samples of each cell were the same, 15 students, then multiple comparisons was applied, Tukey test. It was used to find out which technique affected the reading from the two groups, extroversion or introversion.

RESULT

The calculation of the data in the form of descriptive and inferential statistics can be viewed respectively in the Table 1 and Table 2. Descriptive statistics shows the mean scores of the students. Those students who were taught using CIRC obtained 58.13, while those who were taught using PBI gained 56.46. In terms of personality, extrovert students achieved 54.37, while introvert ones got 45.74. Specifically, the extrovert students taught using CIRC possessed 59.61, while the introvert ones taught by the same technique acquired 47.28. On the other hand, the extrovert students taught using PBI attained 44.23, while the introvert ones taught by the same technique obtained 48.74.

Table 1. Sum of the Calculation of Two-Way ANOVA

No.	Source of Variance	F_o	F_t		Note
			0.05	0.01	
1.	Teaching methods (A)	3.81	4.04	7.19	Not Significant
2.	Personality Types (B)	74.512			Significant
3.	Interaction (A x B)	22.613			Significant

Based on the calculation of a two-way ANOVA on Table 1, it can be seen that F_o for the interaction factor (A x B) is 22.613 higher than F_t on the level of significance $\alpha = 0.05$ ($F_o = 22.613 > F_t = 4.04$) and $\alpha = 0.01$ ($F_o = 22.613 > F_t = 7.19$). This proves that there is a significant interaction effect between teaching

technique and types of personality toward listening skill. Therefore, the null hypothesis (H_0) is rejected, but the alternative hypothesis is accepted. The students having extrovert personality are more suitable being taught using CIRC, while the students having introvert personality are more suitable being taught using PBI. Since there is an interaction effect, it is followed by further analysis by Tukey test for two groups which were compared. The result of Tukey test can be seen in the table 2 below.

Table 2. Sum of the Calculation of Tukey Test

No.	Compared Group	Q_o	$Q_{critical\ value}$	Note
			(0.05)	
1.	A_1B_1 with A_2B_1	6.42	3.36	Significant
2.	A_1B_2 with A_2B_2	3.91	3.36	Significant

It can be seen that Q_o for the effect of teaching methods for the extrovert students is 6.42 higher than Q_t on the level of significance $\alpha = 0.05$ ($Q_o = 6.42 > Q_t = 3.36$). This means that the null hypothesis is rejected, while the alternative hypothesis is accepted. This result shows that the reading comprehension of students having extrovert personality who learn using CIRC is higher than those of the same group who learn using PBI. Additionally, the Q_o for the effect of teaching methods for extrovert students is 3.91 higher than Q_t on the level of significance $\alpha = 0.05$ ($Q_o = 3.91 > Q_t = 3.36$). This means that the null hypothesis is rejected, while the alternative hypothesis is accepted. This result shows that the reading comprehension of students having extrovert personality who learn using CIRC is better than those of the same group who learn using PBI.

Dealing with the first independent variable, Table 1 shows that F_o for the effect of the teaching methods (A) is 3.81 less than F_t on the level of significance $\alpha = 0.05$ ($F_o = 3.81 < F_t = 4.04$). This means that the null hypothesis (H_0) is accepted. This proves that there is no significant difference on reading comprehension between the students who learn using the CIRC than those who learn using PBI. This finding proves that both methods, CIRC and PBI, are two effective methods to teach reading

comprehension. Through those two ways of teaching methods, the result of research proves that the scores of reading comprehension of the students who learn using CIRC are insignificantly different from the scores of students who learn using PBI.

In connection to the second independent variable, Table 1 shows that F_O for the effect of types personality (B) is 74.512 higher than F_t on the level of significance $\alpha = 0.05$ ($F_O = 74.512 > F_t = 4.04$) and $\alpha = 0.01$ ($F_O = 74.512 > F_t = 7.19$). This means that the alternative hypothesis is accepted. This proves that there is a significant difference on the scores of reading comprehension between the students who have extrovert personality and those who have introvert personality. In line with all the findings mentioned, there are some important points need to be discussed. First, the finding shows that there is an interaction between the techniques of teaching and types of personality upon the students' reading comprehension. This implies that a certain technique of teaching is more suitable for a certain type of personality. In this study, it was found that in teaching reading comprehension, CIRC is more effective than PBI for the extrovert students; on the contrary, PBI is more appropriate than CIRC for the introvert students. The reading comprehension of the extrovert students (mean score = 54.37) is better than those who are introvert students (mean score = 45.74). This indicates that the extrovert students have better reading comprehension compared to introvert students.

The findings reveal that extrovert were more successful as introverts in reading comprehension overall. Then, it is supported by the study of previous research (Sulaiman, 2015) found out that extrovert personality is better than the students with the introvert personality in EFL. They have benefits in individual characteristics which help them in EFL, for instance communicating actively, being adventurous, and keeping themselves sociable, (Elliott, Kratochwill, Cook, & Travers, 2000). In reading activities, the extroverts build up their interest and keep their cooperation; thus, it leads them to reach better comprehension. Nevertheless, the introvert learners' reading comprehension who learn using PBI is better than those who learn using CIRC. In general, the introvert learners are such as silent, shy, cautious, and reclusive. They often avoid being the center of

attention in class activities. In the similar line, (Grant, 2013) explains the introvert learners tend to remember better and faster in the easy and relaxing atmosphere. (Haakonsson, Burton, & Obel, 2008) add in the pleasant atmosphere students are braver to take risks without being afraid of failure. Hence, the introverts are able to express themselves optimally they work on their own even though pair work or group is still possible

Even though the result shows that there is an interaction between the teaching methods and personality types on reading comprehension, the answer to the second hypothesis in which CIRC is more effective than PBI is rejected as the result shows that the mean score of reading comprehension of the students who learn using CIRC (58.13) does not differ significantly from the mean score of students who learn using PBI (56.46). This indicates that both methods similarly affects to the students' reading comprehension. The possible reason related to this finding is due to the number of students to investigate this hypothesis. The total covers the whole members of the class (50 students in each group). Meanwhile, concerning the analysis of the interaction, the number of students in each cell is only 15 respectively, which is determined through the use of percentage on the result of questionnaire (30% above the average score classified as extrovert and 30% below the average score classified as introvert). Dealing with the limitation of the study, it needs more intensified concern in the further research.

The result proves that the students' reading comprehension is not significantly different whether they are treated with CIRC or PBI, both methods work effectively creating enjoyable learning experience, building their self confidence, and increasing the level of participation. CIRC learning process gives more opportunities to learners to share or discuss their analysis result to others. The activities allow them to interchange the ideas. Thus, learners have more experience and in turn, it forms better concept of mastery. Discussion trains the formation of elaborating cognitive ability as well and the information lasts longer when the learners actively involve in restructuring activity or cognitive elaboration (Slavin, 1995). Meanwhile, PBI includes learner-centered learning for problem solving (Savery, 2006) and learners are exposed to complex problems (Hmelo-Silver, 2004). PBI opens chances to become responsible learners for

their own learning, and the teacher becomes a facilitator of the learning process. This confirms the finding that CIRC and PBI are effective methods in teaching reading comprehension.

In accordance with the third hypothesis, that reading comprehension of the extrovert students is better than the introvert ones is accepted based on the result of the study. The extrovert students' mean score (54.37) having been inferentially analyzed is found significantly different from the introvert students' mean score (45.74). The result confirms Brown's belief (2000) dealing with extroversion and introversion that potentially affect the learners' language learning. Additionally, it verifies the research conducted by Badran (2001) and Sulaiman (2015) focusing on the productive skills, speaking or writing, while this one focuses on the receptive skill, reading. In other words, the personality types (extroversion and introversion) do not only affect the success of productive skills (speaking or writing), but also the receptive skill (reading or possibly listening). Overall, this study provides an opposite insight into the Brown's belief (2000) stating that personality types (extroversion and introversion) are aspects which determine the development of oral communicative skills; nevertheless, it turns out that both oral and written communicative skills are affected, including receptive and productive.

CONCLUSION

Taken together, it can be concluded that teaching methods and personality types provide an effect on the students' reading comprehension. Both CIRC and PBI are effective teaching methods to help them achieve better reading comprehension. The differences in personality types, introvert and extrovert, also affect the differences in reading comprehension. The CIRC is eventually more appropriate for the extrovert students, while the PBI is more appropriate for the introvert students.

In regard to the conclusion, firstly it is strongly recommended to English teachers in the school to utilize both CIRC and PBI to teach reading comprehension courses, and secondly they need to improve their understanding related to the students' personality types especially extrovert and introvert. The teachers can take advantage the use of CIRC for the extrovert students, while they optimize of the

use of PBI for the introvert students. Thus, they are able to develop the students potentials in reading course appropriately.

REFERENCES

- Aiken, L.R. (1994). *Psychological Testing and Assessment*. Massachusetts: Allyn and Bacon, A Division of Simon & Schuster, Inc.
- Badran, A. H. (2001). *Extroversion/Introversion and gender in relation to the English pronunciation accuracy of Arabic speaking college students*. Egypt: Report-Research Press.
- Boud, D., & Feletti, G. (1997). *The challenge of problem-based learning* (2nd ed.). London: Kogan Page.
- Brown, H. D. (2000). *Principles of Language Learning and Teaching*. New York: Logman.
- Cain, S. (2012). *Quiet: The power of introverts in a world that can't stop talking*. New York: Crown Publishers.
- Cloninger, S.C. (1993). *Theories of Personality*. New Jersey: Prentice-Hall Inc.
- De Hoogh, A.H., Den Hartog, D.N., & Koopman, P.L. (2005). Linking the Big Five Factors of personality to charismatic and transactional leadership; perceived dynamic work environment as a moderator. *Journal of Organizational Behavior*, 26(7), 839-865.
- Duch, B. J., Groh, S. E., & Allen, D. E. (2001). Why problem-based learning? A case study of institutional change in undergraduate education. In B. Duch, S. Groh, & D. Allen (Eds.), *The power of problem-based learning* (pp. 3-11). Sterling, VA: Stylus.
- Elliott, S.N., Kratochwill, T.R., Cook, J.L. & Travers, J.F. 2000. *Educational Psychology Effective Teaching Effective Learning*. USA: The McGraw-Hill Companies, Inc.
- Grabe, W. (1997). Current developments in second language reading research. *TESOL Quarterly*, 25(3), 375-460.
- Grant, A.M. (2013). Rethinking the extraverted sales ideal: The ambivert advantage. *Psychological Science*, 24(6), 1024-1030.
- Haakonsson, D.D., Burton, R.M., Obel, B., & Lauridsen, J. (2008). How failure to align organizational climate and leadership style affects performance. *Management Decision*, 46(3), 406-432.
- Harris, T.L., & Hodges, R.E. (Eds.) (1995). *The Literacy Dictionary: The vocabulary of reading and writing*. Newark, DE: International Reading Association.

- Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? *Educational Psychology Review*, 16(3), 235-266.
- Kumaravadivelu, B. (2006). *Understanding Language Teaching: From Method to Postmethod*. New Jersey: Lawrence Erlbaum Associates, Inc.
- Lanyon, R.I. & Goodstein, L.D. (1982). *Personality Assessment*. New York: John Wiley and Sons, Inc.
- Savery, J.R. (2006). Overview of Problem-based Learning: Definitions and Distinctions. *Interdisciplinary Journal of Problem-Based Learning*, 1(1), 9-20.
- Slavin, R. E. (1995). *Cooperative Learning: Theory, Research, and Practice*. Englewood Cliffs, New Jersey: Prentice-Hall.