THE COMPARISON BETWEEN VISUAL LEARNERS AND KINESTHETIC LEARNERS IN READING COMPREHENSION AT THE ELEVENTH GRADE STUDENTS OF SMA NEGERI 2 PAMEKASAN

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Abstract: Comprehending English text is still one of the focuses on the English teaching-learning process in Indonesia. However, students’ ability to comprehend English reading text is various. Some theories mentioned that reading comprehension of the students is influenced by students’ learning styles. This research is to compare reading comprehension between visual and kinesthetic learners at the eleventh-grade students of SMA Negeri 2 Pamekasan. This study used a quantitative approach with a causal-comparative design. The population of this research was 320 eleventh grade students with the sample was taken were 48 students or 15% of the population. The data were collected using Sensory Learning Style Questionnaire to divide students based on their learning style and Reading Comprehension test to measure students’ reading comprehension. The obtained data were analyzed by using the independent t-test to compare the significant difference between visual and kinesthetic learners. The statistical analysis was computed using SPSS 16. The result proved that obtained t-value was lower than t-table with significant 5% and 1% (1.084 < 2.06 and 1.084 < 2.79) which showed that the achievement of reading comprehension of visual students was same as kinesthetic learners at the eleventh-grade students of SMA Negeri 2 Pamekasan.

Keywords: Auditory; Kinaesthetic; Learning Style; Reading Comprehension; Visual

INTRODUCTION

Learning is the process of gaining more knowledge, or of learning how to do something (Pritchard, 2009: 1). In learning, learners get information and experience which they do not know before. Of course, the learners need to take some steps to gain knowledge. The process can take a long time or short time. However, both of them, long time or short time, the learners are expected to change their behavior to the positive things.

One of the ways to obtain the knowledge is by reading. In reading, the reader needs to catch the meaning of the text in order to understand the information in the text and finally
obtain the knowledge. Furthermore, learners need to have a good reading ability in order to be able comprehending the meaning of the text easily. Consequently, some teachers concern to improve the reading ability of the students to facilitate learners get the knowledge from the text especially English text. Still, learners' ability to comprehend the text is different from each other and how they process the information may be differenced each other. One of them may need to visualize first to get the meaning, some of them need to voice the sentence and the others need to demonstrate what they read to get the information. This difference is called a learning style.

Learning style is a term in an educational context. Alan Pritchard (2009: 1) defines a learning style is a preferred way of learning and studying. It is the way in which each person begins to concentrate on, process, and retain new and difficult information (Dunn & Griggs, 1998: 14) and it is the way people learn and the ways people attack the problem (Brown, 2000: 113–114). It can be concluded that learning style is a preferred way for a person in processing new information and solve the problem. It means that student can have more than one modality with one or two dominant modalities. The dominant modality can be defined as their learning style.

Because learning style is only a preferred way, it means learners can learn more effectively in a certain style than another. In addition, the learners cannot learn the material in a style which is not theirs. For instance, the learners who like learning through picture, diagram and something visual cannot learn effectively if they are pushed to learn by demonstrating or manipulating. On the contrary, the learners who learn effectively by demonstrating and doing manipulation will get difficulty if they are pushed to learn through pictures, diagram and something visual.

DePorter, Reardon, & Singer-Nourie, (2005: 84) just categorize the learning style into visual, auditory and kinesthetic. These models are commonly called as VAK models. Kinesthetic learners prefer to learn by doing and direct involvement. Kinesthetic learners learn best when they incorporate movements using their large or gross motor muscles. Auditory learners prefer to learn through verbal instructions from themselves or others. Visual learners prefer to learn by seeing and watching demonstrations (Williams, 2010: 51–52). Shortly, visual learners are learners who learn from what they see. Auditory learners are learners who learn more from what they listen or hear. And kinesthetic learners learn more from what they do.

Learning method and learning style often determine the success of the learners (Shaffat, 2009: 9). The teacher and learners should identify the learning style of the learners. Knowing learning style will make the teacher provide the learning method which is suitable for the learners' style. If the learning method is not suitable with the learning style, it will influence the learners' success in learning. Even, they are failed in their learning. However, many teachers are not aware of the learners' difference. They consider
that learners are the same. Therefore, they provide the same strategy to treat their students.

From the interview with one of the students of SMAN 2 Pamekasan, namely Holifatur Rohemawati, the researcher got information that the English teachers of SMAN 2 Pamekasan often provide textbook or worksheet as learning material in teaching learning process to let the learners read the material by themselves. Some students will sit down quietly and read the material with their pleasure without any burden in their face. Furthermore, when the teacher asks the question about the text, they will answer it correctly and the teacher gives a good score for them. However, not all students read the text with their pleasure. Some of them just read the text for a while and some minutes later they are busy with their selves. They talk to each other; they play things in from of them and so on without noticing the teacher’s instruction to read the text. Consequently, when the teacher asks them about the text, they cannot provide the correct answer and ultimately they get bad score.

An individual’s ability to comprehend text is influenced by their traits and skills, one of which is the ability to make inferences. Douglas Brown stated that Visual learners tend to prefer reading and studying charts, drawings, and other graphics information (Brown, 2007: 129). Besides, Carbo stated that good readers prefer to learn through their visual and auditory senses, while poor readers have a stronger preference for tactile and kinesthetic learning (Reid, 1987). Visual learners are able to read quietly in their style with full of pleasure without making any noise. In this way, they are able to visualize what they read to get the meaning of the text.

In the Indonesian context, there are some researches which studied about individual differences. For example, Sahwari (2014) studied extrovert and introvert university students in writing achievement. Individual differences in terms of interpersonal and intrapersonal in relating with speaking skills have studied by Syafik which revealed that interpersonal students have better English speaking skills (Syafik, 2014). However, only few researchers which focus on sensory learning style. In Rika Endah Nurhidayah’s thesis entitled Learning Styles Characteristic and Learning Outcomes of Nursing Faculty Students of the University of Sumatera Utara found that kinesthetic learners have a better score in practicum activity than another learning style (Nurhidayah, 2010: 18). Furthermore, this present research will compare visual and kinesthetic learners in reading.

The aims of this research are to compare reading comprehension of visual and kinesthetic learners and to know which group has a better understanding of reading comprehension by assessing students of SMAN 2 Pamekasan. Thus, the researchers propose two research questions: 1) Do visual learners have better reading comprehension than kinesthetic learners at the eleventh-grade students of SMA Negeri 2 Pamekasan? 2) Is there any statistically significant difference between visual and kinesthetic learners at the eleventh-grade students of SMA Negeri 2 Pamekasan in reading comprehension? To
answer those questions, the researcher will study eleventh-grade students of SMAN 2 Pamekasan by using a questionnaire to divide students based on their learning style and giving a reading test to know students' reading proficiency.

The researcher is curious whether visual learners have better reading comprehension than kinesthetic learners. The researcher is interested to conduct this study because this study is beneficial. This research will add the knowledge that learners have the different learning style. In addition, by knowing the learning style, the teacher is hoped to provide suitable strategies with learners' style. The researcher tries to compare visual and kinesthetic learners' reading comprehension. Therefore, the researcher will conduct a study with the title *The Comparison between Visual Learners and Kinesthetic Learners in Reading Comprehension at The Eleventh Grade Students of SMA Negeri 2 Pamekasan*.

**METHOD**

This research used a quantitative research approach in which causal comparative as research design. This study will investigate cause and effect relationship between Visual and Kinesthetic learners on reading comprehension. all students of the eleventh grade of SMA Negeri 2 Pamekasan which consists of 320 students will be involved as the population. However, according to Arikunto's statement, that is, if the population or subject is big or more than 100, the researcher can take between 10-15% or 20-25% or more based on the researcher's ability from the time, energy, and fund (Sahwari, 2014: 34). Furthermore, the researchers take 15% of the population and employ simple random sampling to take 48 students as the sample.

Sensory Learning style which proposed by Bobbi dePoter is used to divide the students based on their learning style (DePorter et al., 2005: 166–167). The reading comprehension test is utilized to measure the reading comprehension of the visual and kinesthetic learners and it is developed based on the Teacher's Lesson plan. It consists of 3 passages with 20 short answer questions which the complete answer will get 3, the incomplete answer will get 2, and the wrong answer will get 0. Before distributed the reading comprehension test, the researchers had validated by the English teacher of eleventh grades students at SMAN 2 Pamekasan. Afterward, Independent sample T-test is used to compare whether visual or kinesthetic learners who have better reading comprehension.

**RESULTS AND DISCUSSION**

The study aimed to compare the reading comprehension of visual and kinesthetic learners. After reviewing some theories, the researchers hypothesize that visual learners will have better reading comprehension than those of kinesthetic learners. The hypothesis was tested at the 0.05 level of significance. The data were collected from the Questionnaire and Reading Comprehension Test and computed by using SPSS 16. After distributed the
questionnaire to 48 students, the result of the questionnaire showed that there are 35.42% visual learners (17 students), 31.25% auditory learners (15 students), 20.83% kinesthetic learners (10 students), three visual-auditory learners, one auditory-kinesthetic learner, one visual-kinesthetic learner and one multi-style learner. However, only 27 students were studied in this research since researchers just compare visual and kinesthetic learners. The reading comprehension test score of both groups was shown on table 1.

Table 1.
Group Statistics Reading Comprehension score

| Groups    | N  | Mean | Std. Deviation | Std. Error Mean |
|-----------|----|------|----------------|-----------------|
| Score     | Visual | 17   | 75.41          | 14.757          | 3.579           |
|           | Kinesthetic | 10   | 68.40          | 17.044          | 5.390           |

Table 2.
Independent Samples Test

| Levene's Test | t-test for Equality of Means for Equality of Variances |
|---------------|--------------------------------------------------------|
| F             | Sig.         | t    | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |
| Score         | Equal variances assumed | .581 | .453 | 1.126 | 25 | .271 | 7.012 | 6.224 | -5.808 | 19.831 |
|               | Equal variances not assumed | 1.084 | 16.845 | .294 | 7.012 | 6.470 | -6.648 | 20.671 |

Reading comprehension score reveals that visual learners have obtained the mean value of 75.41 and kinesthetic learners have obtained the mean value of 68.40. The mean value of both groups showed there is a difference score between both groups. It means that visual learners have a higher score than those of kinesthetic learners on reading comprehension. This finding also deals with Febrianti’s research (2015) which revealed that kinesthetic learners have a lower score than visual learners (Febrianti, 2014). Consequently, to measure whether the difference score of both groups is significance, independent sample t-test was carried out. The computation was shown in table 2.
Table 2 above revealed that significant value between two groups is 0.453 which is higher than the predetermined alpha value (0.05). This result indicates that there is no significant difference in reading comprehension score between Visual and Kinesthetic learners. The possible explanation of this finding is that the free chance of students to show their learning style in solving reading comprehension test. The atmosphere of reading section support visual learning style. Furthermore, for kinesthetic learners, the researcher gives them a freedom to do whatever the need to make them concentrate on such as doing some physical activities before they read, shaking their legs and so on.

In addition, table 2 also reveals that the t-value is 1.084 which is lower than t-table (2.06). It means that the alternative hypothesis is failed to be accepted and the null hypothesis is accepted. Furthermore, it can be concluded that Visual learners of the eleventh-grade students of SMAN 2 Pamekasan do not have better reading comprehension than kinesthetic learners. This finding of this research also is in harmony with Febrianti’s research which revealed that learning style (visual, auditory and kinesthetic learners) have no effect on reading comprehension.

In this study, the researchers just focused on comparing visual and kinesthetic learners and neglecting auditory learners. Besides, this study just involved the sample of a population. Furthermore, further researchers are expected to explore learning style in relating with the strategy used and how the teacher deal with the students with different learning style in class. Besides, further researchers are expected to expand the total amount of participants to make the result have more generalization. In addition, multilevel participants are needed to get more explanation of whether learning style is really affect reading comprehension.

CONCLUSION

The main findings of the research are the achievement of reading comprehension of visual students is same as kinesthetic learners at the eleventh-grade students of SMA Negeri 2 Pamekasan and there is no statistical difference between visual and kinesthetic students at the eleventh-grade students of SMA Negeri 2 Pamekasan in reading comprehension. From the result of this research, the present researchers suggest having more attention to the diversity of the students. So that, lecturers and students can accommodate strategy suitable for students’ learning style to get to get an optimal result in learning English.

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