THE EFFECTS OF LEARNING MODEL AND COGNITIVE STYLE ON STUDENTS’ ENGLISH LISTENING SKILL

Research Article

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Abstract

Listening is one of the most basic language skills in second language learning. The various obstacles in language learning can be overcome through the use of learning models and cognitive styles that are appropriate with the characteristics of the students. The objective of this research is to find the effect of learning models and cognitive style toward the students’ English listening skill. This research is an experimental study with treatment by level design and analyzed using two-way ANOVA at a significance level of 0.05. The participant of the study consisted of 32 students who were divided into two groups, namely the experimental group and the control group. The data were obtained through listening tests and cognitive style tests. The results showed that the students who were taught with integrative learning models were better than those taught with experiential learning models. There is an influence of interaction between learning models and cognitive styles on listening skills. The listening skills of the student who have the cognitive style of field independent that is taught with integrative learning models are higher than those taught with experimental learning models.

Keywords: Learning Models, Cognitive Style, Listening Skills.

1. Introduction

In various literature, it is found that listening skills are sometimes ignored; whereas listening is one of the skills that has a very important role (Khalili Sabet, 2012). Listening is a process to listen to the oral symbols with full attention, understanding, appreciation, and interpretation to obtain the information, capture content, or messages and understand the meaning of communication that has been conveyed by the speaker through speech or spoken language. Teaching is an attempt to help, guide, and explain to someone to acquire of positive skills, attitudes, ideas and knowledge (Bozorgian & Pillay, 2013; Renukadevi, 2014; Ur, 1995). Teachers can interact with students during the learning process to create a conducive atmosphere. Teaching listening in the classroom is different from the existing listening activities in the community or real life. Ur (1995) mentions that listening in social life must meet several elements are as follows: 1) listening for the purpose of obtaining certain information, 2) reviewing what has been heard, 3) paying attention to people who are listening, 4) paying attention some environmental and visual information about the meaning
heard, including stretches of discourse heard in short monologues, 5) most discourse is spontaneous and distinct from oral discourse including with the character of the listener. Various studies show that listening skills have a very significant role in language learning. Because without practice, listening skills cannot be developed and practiced (Campbell, 2011; Drood & Asl, 2016; (Keaton & Bodie, 2013; Shang, 2008).

Listening has an important role in improving students’ language skills. One of the learning activities in school is to listen to the information, after following the learning activities of listening information, students are expected to speak and convey information. The material in listening skills and speaking skills has a prominent place in language learning around the world today. The need for fluency in English around the world is due to the role of English as an international language that has given priority to find more effective ways of teaching English (Qodratillah, 2008; Richards, 2008). Purdy et al (2017) demonstrated that listening is a major component of language teaching and learning which was the first spotlight in the late 1970s by James Asher working on Total Physical Response. In TPR, learners are given sufficient understanding to listen or listen before they are encouraged to respond verbally (Brown, 2007; Acat et al., 2016; Hindun, 2014; Oduolowu & Oluwakemi, 2014).

Listening is a complex activity. Coordinate sounds, vocabulary, grammar structures, and background of knowledge that involves many mental processes on the part of listeners (Bozorgian & Pillay, 2013; Shang, 2008; Wahyuni and Ibrahim, 2014; Zohrabi and Esfandyari, 2014). Listening or listening skills are essential for reading comprehension because it only consists of "38" to "51" entities that the government incorporates into listening skills as part of the standard of English art ((Beall et al., 2008; Campbell, 2011; Kotzman et al., 2008). Listening is a complex process - an integral part of all communication processes. This listening process includes the process of receiving, attending, understanding, responding, remembering (Kline, 1996).

Effective listening is a key component of communicating, as it allows us to gather the information necessary to understand others, and in this way, we can respond as we have heard, convey our insights and views. Raise awareness of how the process works, and the ability to listen carefully and empathy is key to managing conflict effectively (Grognet et al., 2005; Heaton, 1987; Nautiyal, 2016; Sajjadi & Zamaniyan, 2015). The purpose of listening is to help students understand discourse, that is, to understand the sample of authentic oral texts. To achieve this, of course, listening should be gradually done based on sentence-listening, to help understand the text. This often involves learners from outside for up-and-down top management, since listening can exceed sentence levels using knowledge of the context, topics, settings, participants and objectives (Richards, 2010). Therefore, this study was conducted to know the effect of learning models and cognitive style toward the English listening skill.

According to (Campbell; 2011; Hsu et al., 2013) Limited listening skills will hinder the communication process directly. While adequate listening skills will have a positive impact on students in providing feedback or feedback in the form of speech sound signals. This listening and reciprocal or interaction assignment have been ignored in the language class causing the failure of a second language or foreign language learning process.

Kotzman et al (2008) mention that listening has different characteristics by talking or communicating with others where we involve two main tools as a compliment, i.e a simultaneous process that takes place continuously when: a). Speaking and expressing yourself, b). Listening and responding to others. Speaking involves sending messages. While listening involves both recipients of messages from others and responding to them. Regardless of how we listen, send the same message back to the speaker. Effective listening
and responding can produce and convey our understanding (or sometimes misunderstanding) of the speaker's message.

In the listening courses, there are many factors that can cause the students difficult to achieve adequate of language skills. The factors such as curriculum, lecture, teaching methods, student self, facilities and infrastructure also become obstacles in achieving optimal results. Each lecturer is required to master the various abilities as a professional lecturer in his field especially with regard to methods or learning strategies. The lecture has a very significant role in the learning process of listening and provide the best support for the success of students in the listening learning (Izadi, 2012; Badi, 2012; Yusnida, Muslem & Manan, 2017).

Weger et al (2014) explained that effective listening is very important. That's easy: most of what we do or do not do (the way we act and respond to others) is based on an understanding of the message delivered. In practical terms, misunderstandings can spend time, money, credibility, and even relationships. Conversely, accurate messages received create comfort, confidence, and deep appreciation. There are three different modes and four different levels of Effective Listening Skills. Three modes, or manners, listening is Attention, Responsiveness, and Active. The four listening levels are factual, Perceptive, Emotional, and Mixed.

Until now, the teaching of English, especially listening skills, was still provided. However, in the learning process there are still weaknesses experienced by students. This weakness is seen mainly in writing and from the results of listening to them. Some of the causes of students' lack of success in listening to the possibilities were due to the lack of interesting material presentation, students thought that language courses were too easy to learn. To improve and develop their listening skills, it is necessary to make the improvements in the presentation of material, selection of materials, teaching model and cognitive style as well as the assessment system.

Design and engineering of the learning process can be applied well by the teachers or lecturers tailored to the level of intellectual understanding of students. Ideally, teachers or lecturers should understand well the characteristics, learning styles and cognitive style of the students in order not to be mistaken in choosing the appropriate learning model. One of the learning models for 4 (four) language skills is the integrative learning model and experimental learning model.

In addition to the learning model, the learning style (cognitive style) of students also influences the listening skill. The cognitive style is the way a person learns something. Learners will be able to learn well and have good skill results if he understands his cognitive style. This allows learners to apply learning techniques easily and appropriately. Skill is a description of the level of student mastery of the learning objectives on the topic of the experimented discussion, as measured by the number of scores the correct answer questions prepared in accordance with the objectives of learning. The cognitive style that people have can be grouped independent and field independent fields. (Lohman, 2002; Zeng, 2018).

According to (Grognnet et al., 2005; İpek, H, 2018; Weger et al., 2014) that listening is the most important element in language and language learning, because it is the key to speaking, and more than that, reading and writing. Here are presented some research results related to the topic of the article. (Acat et al., 2016; Oduolowu & Oluwakemi, 2014; Sajjadi & Zameniyan, 2015) stated that listening is the first language skill to acquire someone in his or her life and one of the skills that requires some of its potentials. According to Papalia in (Hindun, 2014) mention that the most easily recognizable human language activity is spoken language, verbal communication, and speaking is the most effective and efficient communication. However, a new person is said to be a speaker if there is a listener, and conversely, someone can be a listener if there is a speaker. A person who remembers
information is a person who has stored the information in IJPa (Long Term Memory) and may also bring up the information when necessary. The process of sieving is defined as the process of searching the essence of a message and combining it until there is a unified understanding. It is basically that a sentence captured by the sense of hearing is not heard entirely and is not processed at once. The sentence is received in a fragmented, searched meaning and connected as the whole sentence is finished. According to Qodratillah (2008), listening, as a verb “v” is: 1) listen (pay attention) well what people say or read: he is ~ reading Qur'an from radio; 2) review (examine, study) thoroughly: ~ back the governor's report.

Meanwhile, (Khuziakhmetov & Porchesku, 2016; Wahyuni and Ibrahim, 2014;) explore that listening is an ability that allows a language user to understand the language orally. Erhamwenmwonyi and Asemota (2015) undertook research to observe and analyze four practices of linguistic activity. Listening can help students to gain a detailed understanding of the information. To understand complex foreign languages, it can be done through small group activities in listening that can stimulate his imagination, train to think and speak. Listening and vocabulary have a close relationship. Equally important is to listen to the overall meaning. The results show that in listening Students learn better and faster and have a clearer assessment of what is heard. Listening and speaking are the two most important forms of communication skills. These skills can be taught through a direct, integrated, incidental, eclectic and dialogue approach. Listening comprehension is an active and conscious process which carried out by listeners to build the meaning by using cues from contextual information through existing knowledge (Saputra, 2014).

Theoretically, listening comprehension is considered an active activity in which students focus on internal and external aspects as well as their relationship to previous knowledge. Coakley and Wolvin (1986) quoted in (Milasari, 2008; Huerta et al., 2010) explore the understanding of listening to a second language as a process of acceptance, focusing on attention and aural stimuli. It also includes listener, cognitive knowledge and process related to listening, aural text, and interaction between the two. Furthermore, Farris (1995) quoted in Osada (2004) that the understanding of listening students can form a positive mental in accordance with knowledge about the information and topics contained in the text of the monologue.

According to (Early, 1960; Heaton, 1987; Hutchby, 2015; Janusik, 2012; Levitt, 2002; Purdy, et al, 2016; Weger, et al, 2016) an effective way to develop the listening skills is through the provision of carefully selected training materials. This material is in many ways similar that used for understanding the listening tests. Although listening skills are closely related to oral skills in normal speech situations, sometimes it is also useful for teaching and testing. While (Hogan et al., 2014) described that listening comprehension can be conceptualized more broadly as a person's ability to understand what someone is hearing, not only in the service of reading comprehension but also for others to understand the story told at the dining table for example or build a mental model that is appropriate to the situation at that time.

Moreover, some research had been conducted to analyze the effect of learning model and cognitive style toward students’ (speaking, reading or writing) skills, but only few research had been analyzed the effect toward students' listening skill. A study by Kurniati (2017) to determine the relationship between the habits of students in listening conversations in English and mastery of vocabulary students of the second semester (two) of English Education Program FKIP University Batanghari academic year 2015/2016. This type of research is descriptive quantitative. The sample of this research is a student of the second semester (two) of English Education Study Program FKIP, University of Batanghari 2015/2016 academic year taken whole that amounted to 59 students. Researchers found that
the lowest score on English conversational listening habits is two hours per week and the highest is up to 5 hours per week. The percentage of students’ vocabulary skills included in the good category is 16% or as many as 10 students, medium of 81% or as many as 48 people and low 1% or only one student. After finding the score of each variable, the researcher found that the calculation of correlation between variable X and Y by using Spearman Rank formula with R value of 0.075 or can be categorized into very low correlation so it is found that there is no significant correlation relationship which the value of $Z_{count} = 0.570$ because $Z_{table} = 1.96$ with 5% significant level, meaning $Z_{hitung} < Z_{table}$, then Ho accepted and Ha rejected.

According to (Arono, 2014; Janusik, 2012; Nautiyal, 2016; Salimi & Ahmadpour, 2015; Zohrabi et al., 2014) conducted a study to find out the innovative learning methods used in improving critical listening skills and student activities by using interactive multimedia and to measure the effectiveness of multimedia in improving the students' critical listening skills. The results showed that (1) the students created and developed an active, creative, and effective listening learning process independently (2) Improve students' critical listening skills through interactive multimedia. Critical listening methods in the PMAI Model can improve students' critical listening skills so that this model is better to be applied as a reference application in a listening learning model and instructional media with interactive multimedia can improve students' critical listening skills rather than audio-learning media because it listens not only aspects aural but also the visual aspect that is integrated with multimedia.

Moreover, (Renukadevi, 2014; Guan, n.d.; Sajjadi & Zamanian, 2015; Shang, 2008) want to know the use of listening strategies on different linguistic patterns for different levels of proficiency. There are three main questions that are used in relation to the English listener of Taiwan as a foreign language (EFL): (1) For different levels of proficiency, the listener uses which pattern corresponds to a higher listening comprehension level when negative, functional, and contradictory statements facts used? (2) Is there a significant difference between the type of goods and the level of proficiency? (3) What are the differences and frequencies in the use of listening strategies reported by individual listeners? To explore the above issues, quantitative research methods are applied, including self-perceived surveys, t-test techniques, and variance analysis.

The results of this study suggest that high scores and initial listeners produce higher scores on statements that are contrary to facts, followed by functional expressions and negative expressions. The listener skills at this level tend to use strategies when listening to statements that are contrary to facts, while beginner level listeners always use memory strategies when listening to negative expressions. The implications for EFL educators to recognize the direction of learning practice to improve listening comprehension are presented.

1.1. Assessment of Listening Skill

In listening skills test, awareness is very important because it is different from with the written of language skills. For example, the language used is much more complex than language written in a particular way, as a result, contains a large element of 'redundancy' (Akhadiah, 1988). Wahyuni and Ibrahim (2014) cited that listening is more directed at the ability to understand the meaning of a form the language used orally.

According to (Hogan et al., 2014), the assessment of listening skills can be carried out together with the purpose designed of learning activities. Therefore, disclosure of listening skills can be done using the exercises of certain tasks. Listening assessments are carried out by listening to oral discourse as assessment material. The discourse can be heard directly by a speaker, as far as possible native speakers of the language who are the target of the test or just
through the tape or video recordings. The discourse that has been played is accompanied by a task that must be done, and questions must be answered.

The assessment process in the learning listening is carried out during the process by looking at the development of test resulted in several stages of learning. It is becoming very important, meaning that is by examining, reviewing, giving the direction and input to students, and using an assessment instrument as a benchmark for the achievement of abilities (Sailah, 2014).

To understand the nature of the listening process, we need to consider some characteristics of oral discourse and the problems specifically related to listening. It was also stated that discourse has characteristics that are very different from those written in the discourse, and these differences can add a number of dimensions to understanding how we process the speech. For example, speaking discourse is usually instantaneous. Listeners must process it "online" and often there is no chance to hear it (Campbell, 2011). According to Akhadiah (1988, p. 25) listening ability is receptive. In the Valette classification, this ability includes communication skills: students understand messages communicated orally. This ability is basically cognitive. At a higher level, it can be described as the ability to analyze a message delivered orally in the target language, concluding a number of messages communicated through recording in the target language. Acat et al (2016, p. 212) stated that measurement and assessment of listening skills must be carried out between other measurement and assessment activities.

1.2. Model

According to Majid (2015) in general, the term "model" is defined as a conceptual framework used as a guide in conducting an activity. In another sense, the model is also defined as an object or an artificial object of the real thing, like the "globe" which is the model of the earth in which we live. In the next term, the term model is used to denote the first sense as a conceptual framework. On the basis of such thinking, the "teaching and learning model" is a systematic conceptual and systematic concept of organizing learning experiences to achieve specific learning goals, functioning as a guide for teaching designers, as well as teachers in planning and carrying out teaching and learning activities. Thus, teaching and learning activities are truly a systematically organized objective activity.

A model is not the same as the theory. Roberts (1978) notes a model in the planning program, "A model of instructional design is the result of a component-testing or building-theory process, in which case the design of the model is built on a weak theory or no theory at all" (p. 7). Brady (1985) also illustrates that the model is a guide to the preparation and execution of learning, and does not lie in the advanced theory "(p.11) So it can be said that it is not enough for a teacher to know only one or two instructional models, so many different types of approaches and contexts A thorough knowledge of a number of models can lead to great flexibility, efficiency for teachers. Some models can facilitate the ability to adapt to the model or to combine it with others, and offer valuable approaches that enrich the repertoire teacher (Zhang & Collis, 1995).

Sunhaji (2014) stated that the thematic-integrative learning model is very helpful in facilitating the teaching and learning process of the students because the problems faced in the real world could not always be explained fractionally into the field of study or subjects, but there are interrelationships between fields or subjects. Many of these issues require an assessment from multiple perspectives using concepts or principles that come from different fields of study or subjects.

Another element that is an aspect of the importance of integrated learning is to encourage learners to work together with their classmates and learners more empowered as learners, in addition to providing more opportunities for them to tailor learning activities with their own interests and to be more involved in the assessment topics discussed in class. From
that, it will bring up other benefits as well. First, it can lead learners with a frame of mind to conduct self-assessment or self-investigation. Second, it helps learners how to develop a plan for finding something by using a wide variety of sources. Third, encourage learners to share ideas and knowledge. Integrative learning is a model approach in learning that deliberately links some aspects of integrated learning interfaces (Barber, 2012; Erlina, 2016; Fogarty, 1991) with this integrative model, then students will acquire knowledge and skills intact, so that learning becomes meaningful for students. Meaningful in this case implies the students indirectly learn and understand the concepts which learn through the direct and tangible experience that connects with inter-concepts between subjects that are integrated.

This model is far more effective in efforts to increase understanding and practice of values, rather than conventional approaches that are monolithic (Nanik et al., 2010). Integrative learning puts more emphasis on active student involvement in learning. This is in accordance with the expectations of constructivism learning theory that requires of the students learned according to their experience. Learning according to this theory is very personal hard work, the teacher acts as a facilitator who convinces students to discover their own principles and construct knowledge by solving realistic problems. The previous researchers found that traditional learning models can increase the student learning interest (Canfield, 2002) in order to be able to think effectively and apply the knowledge to return to less optimal life situations (Lane, 2008; Uopasa1, Bunterm, Muchimapura and Tang, 2018).

Based on the concept of integrative learning, Fogarty (1991, p. 2) states that there are 10 models of learning integration, ie fragmented, connected, nested, sequenced, shared, webbed, threaded, integrated, immersed, and networked. The model ranges from the simplest to the most complex, ranging from the separated-subject to the exploration of the integration of aspects in one field of study (model fragmented, connected, nested), models that align across different fields of study (sequenced, shared, webbed, threaded, integrated), to integrate within the learner itself and across the learner (immersed and networked model). The 10 of integrated learning models, there are several classification types namely; (1) the connected type (ie the connected model) ie the inter-discipline model of the field of study, eg subjects Physics, Chemistry, Biology (cognate of science subjects); (2) webbed type (model of spider web) that is thematic learning model with theme approach in inter subjects; and (3) integrated type (model integrated among subjects).

Moreover, (Huerta et al., 2010; Kolb, et al., 2000) mention that experiential learning theory (ELT) which later became the basis of experiential learning model developed by David Kolb around the early 1980s. This model emphasizes a holistic learning model in the learning process. In experimental learning, experience has a major role in the learning process. It is this emphasis that distinguishes ELT from other learning theories. The experiential term here is to distinguish between cognitive learning theories that tend to emphasize the cognitive rather than affective side, and the theory of learning behavior that eliminates the role of subjective experience in the learning process.

Meanwhile, according to Majid (2015) experiential learning is a model of teaching and learning process that enables learners to build knowledge and skills through experience directly. In this case, experimental learning uses experience as a catalyst to help learners develop their capacities and abilities in the learning process.

Ronchetto and Diego (1993) give the opinion that cognitive style is one of the variable learning conditions that become one of the considerations in designing learning. Jeng divides the human cognitive dimension into two parts, namely 1) perception (information gathering) and 2) assumption (information processing). During information gathering, a person is usually happy to create sensation or intuition. Is thought or feeling, a presumption in processing information.
Lohman et al (2002) stated that cognitive styles include constructs such as the field of articulation, the effectiveness of the skill, cognitive versus impulsive complexity, automation versus restructuring, and convergent versus divergent. Knowledge of cognitive style is needed to design or modify learning materials, learning objectives, and learning methods. Expected by the interaction of cognitive style factors, objectives, materials, and learning methods, student learning outcomes can be achieved as much as possible. This is in accordance with the opinion of some experts who claim that certain types of learning strategies require a particular learning style.

Ronchetto and Diego (1993, p. 93) indicated that one of the characteristics of the student is the cognitive style. This cognitive style is one of the typical students in learning, both in terms of how the reception and management of information, attitudes toward information, and habits related to the learning environment. The cognitive style refers to the manner in which people tend to with information about the natural surroundings.

2. Methodology

2.1. Participants

The setting of this study was at the fifth semester of English Education Study Program of Khairun University, Indonesia on academic years 2016/2017 for one semester (September 2017 – February 2018) who contracted the listening subject. All 32 students voluntary participated in the study. The two classes with 32 students could be accessed for the study. All participants have the same position for being the sample of this current study as the department has the policy to randomly redistribute the students every academic year, which is aimed at avoiding superior classes. Those two classes were taught by the same lectures. Regarding this condition, non-probability sampling was used in this study. Based on the coordination with the department management that and the English lecturers, it was decided that the sample of this current 2 x 2 factorial design.

Before entering the study, determine the sample members for each group that was taken from 27% of the top group and 27% from the bottom group based on the rating. Based on the ranking, 27% of the top group was declared as a group of students who were field independent and 27% of the lower group was declared as a group of students who were field dependent. Thus, it produced four groups which consisting of eight samples, namely the experimental group that had a cognitive style of field independent, the experimental group that had a cognitive style of field dependent, the control group that had a cognitive style of field independent, the control group that had a cognitive style of field dependent.

This means that A1B1 consists of eight students, A2B1 consists of eight students, A1B2 consists of eight students, and A2B2 consists of eight students. (See table 1).

<table>
<thead>
<tr>
<th>Variabels</th>
<th>Free Integrative Model (A1)</th>
<th>Learning Models</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI (B1)</td>
<td>8</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>FD (B2)</td>
<td>8</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>16</td>
<td>32</td>
</tr>
</tbody>
</table>


2.2. Procedures

A factorial design of 2 x 2 (see table 2) with control and experimental groups was used in this study (Emzir, 2015). It was relevant that the writer intended to examine the cause and effect of the independent variables and dependent variables. In this study, the data was
analyzed using ANOVA and Tukey’s test for the two independent variables, namely: learning model (integrative and experiential and cognitive style. (table 2).

Table 2. Treatment by Level 2 x 2 Design

<table>
<thead>
<tr>
<th>Variables</th>
<th>Free Learning Models</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FI (B₁)</td>
<td>A₁B₁</td>
<td>A₂B₁</td>
</tr>
<tr>
<td>FD (B₂)</td>
<td>A₂B₁</td>
<td>A₂A₂</td>
</tr>
</tbody>
</table>

2.3. Instrument

In this study, the sample consisted of 32 students that divided into two groups, namely the experimental group and the control group. The data obtained through the listening tests and cognitive style tests. The first instrument comprises of 40 questions that divided into two parts. The first part consisted of 30 essays questions and the second parts of 10 multiple choice question. The second instrument comprises of 25 cognitive style questions. The Kuder-Richardson formula (KR-20) is used to determine the reliability of the coefficient.

2.4. Data Collection and Data Analyses

The instrument was administered lastly. The data was analyzed through several steps. The requirements of the analysis test that used is the normality test of Liliefors test and Homogeneity of population test using F test and Bartlet test at significance level α = 0.05. If it meets these two requirements, the research data was analyzed again through two-way variance analysis (ANOVA) at the significance level α = 0.05. The Tukey Test was used for post-hoc analysis of significant results.

3. Results and Data Analysis

Hypothesis 1: The overall, are there differences in English listening skills between students who study with the integrative learning models and students who studying with the experiential learning models?

Based on the analysis of variance at a significant level α = 0.05, obtained F_count = 4.628 and F_table = 4.20 (see table 3 line 1 for test scores below). The resulted F_count is greater than F_table, it means that H₀ is rejected and H₁ is accepted, so there is a significant difference between the group of students who take the lessons with the integrative learning models and with group of students who take the lessons with the experiential learning models of students’ of English listening skills. Thus, it can be concluded that the integrative learning model is better than the experiential learning model. This means the research hypothesis which states that the overall of integrative learning model is better than the experiential learning model can be accepted. (table 3).

Table 3. Summary of Two-Path ANOVA

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>JK</th>
<th>db</th>
<th>RJK</th>
<th>FO</th>
<th>F_table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between A</td>
<td>344.531</td>
<td>1</td>
<td>344.53125</td>
<td>4.628</td>
<td>4.20</td>
</tr>
<tr>
<td>Between B</td>
<td>4875.781</td>
<td>1</td>
<td>4875.78125</td>
<td>65.498</td>
<td>4.20</td>
</tr>
<tr>
<td>Interaction AB</td>
<td>569.531</td>
<td>1</td>
<td>569.53125</td>
<td>7.651</td>
<td>4.20</td>
</tr>
<tr>
<td>In</td>
<td>2084.38</td>
<td>28</td>
<td>74.442</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7874.21875</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis 2: The Interaction between Learning Models and Cognitive Style toward students' English listening skills.

Based on the analysis of variance about the interaction between learning model and cognitive style of the students' of English listening skills seen in the ANOVA calculation (see table 3 line 3 for test scores above), that the price at a significant level of $\alpha = 0.05$, obtained $F_{\text{count}} = 7.651$ and $F_{\text{table}} = 4.20$. Because $F_{\text{count}}$ is greater than $F_{\text{table}}$, it means that $H_0$ is rejected and $H_1$ is accepted, so there is a significant interaction between learning models (integrative and experiential) of the students' of English listening skills.

After the interaction has been tested, then, the next step is doing the further test. The further test was used to find out about: a) the difference scores of the students' of English listening skills who were treated with the integrative learning model and who were treated with the experiential learning models for groups of students which has the cognitive styles of Field Independent ($A_1B_1 - A_2B_1$); and the difference scores of English listening skills groups of students who were treated with integrative learning models and who were treated with experiential learning models for groups of students which has the cognitive styles of Field Independent ($A_1B_2 - A_2B_2$).

Table 4 below displays the frequency of distribution and percentage the data of English listening skill of the student's which is given the experiential learning model and has the cognitive style of field independent ($A_2B_1$). From the frequency of distribution table, the list of students' skill scores of the experiential learning model and has the cognitive style of field independent ($A_2B_1$), there are 2 respondents in number 1 interval 81 - 83 (25.0%) the absolute of frequency is 2 respondents that got the average reached score, at number 2 interval 84 - 88 (37.50%) student got the average value above by reaching the absolute of frequency is 3 respondent. While the score at number 3 interval 89 - 91 (12.50%) as in low score with the absolute of frequency is 1 respondent. Then the score on number 4 interval 92 - 96 (25.0%) with the absolute of frequency is 2 respondents. (See table 4).

Table 4. The distribution of frequency skill test score of English students which is given the experiential model of learning and has the cognitive styles of field independent ($A_2B_1$).

<table>
<thead>
<tr>
<th>No</th>
<th>Interval Class</th>
<th>Lower limit</th>
<th>Upper limit</th>
<th>F. Absolute</th>
<th>F. Cumulative</th>
<th>F. Relative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>81 - 83</td>
<td>80.5</td>
<td>83.5</td>
<td>2</td>
<td>25</td>
<td>25.0%</td>
</tr>
<tr>
<td>2</td>
<td>84 - 88</td>
<td>83.5</td>
<td>88.5</td>
<td>3</td>
<td>37.5</td>
<td>37.5%</td>
</tr>
<tr>
<td>3</td>
<td>89 - 91</td>
<td>88.5</td>
<td>91.5</td>
<td>1</td>
<td>12.5</td>
<td>12.5%</td>
</tr>
<tr>
<td>4</td>
<td>92 - 96</td>
<td>91.5</td>
<td>96.5</td>
<td>2</td>
<td>25</td>
<td>25.0%</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 5 below displays the frequency of distribution and percentage the data of listening skill of English students which is given the treatment with the integrative learning model and has the cognitive styles of field dependent ($A_1B_2$). From the frequency of distribution score of listening skill variable of English students which is given the integrative learning model and has the cognitive styles of field dependent ($A_1B_2$) as many as 8 respondents in number 2 interval 83 - 85 (50.0%), the average score by reaching the absolute of frequency is 4 respondents, at number 3 interval 86 - 87 (25.0%) student get value above average by reaching the absolute of frequency is 2 respondent. While the score at number 1 interval 54 - 82 (12.5%) and number 4 interval 88 - 89 (12.5%) as in low value with the absolute of frequency is 1 respondent. (See table 5).
Table 5. The distribution of frequency skill test of English students' scores which are given the Integrative learning model and has the cognitive styles of field dependent ($A_1B_2$).

<table>
<thead>
<tr>
<th>No.</th>
<th>Interval Class Lower limit</th>
<th>Upper limit</th>
<th>F. Absolute</th>
<th>F. Cumulative</th>
<th>F. Relative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>54 - 82</td>
<td>53.5</td>
<td>82.5</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>2</td>
<td>82 - 85</td>
<td>81.5</td>
<td>85.5</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>86 - 87</td>
<td>85.5</td>
<td>87.5</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>88 - 89</td>
<td>87.5</td>
<td>89.5</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

In this study, the formula that used to test the hypothesis of free variables and the dependent variable or criterion and main effect is the two-way of Variance Analysis (ANOVA) formula (see table 1 for test scores). The independent variables are; (1) learning model (integrative and experiential) and (2) cognitive style (field independent and field dependent). While the dependent variable or criteria is the listening skill of English students. After all hypothesis test requirements are met, if there is an interaction effect between the learning model and cognitive style on the students' listening skill score, then a further test is performed using the Tuckey test (t-test).

The score of students' English listening skills which is given the integrative learning model and has the cognitive styles of field independent ($A_1B_1$) compared with the students' listening skills score of the students group which is given the experiential learning model and has the cognitive styles of field independent ($A_2B_1$), $Q_{count} = 6.091$ $Q_{table} = 4.53$ (see table 6 for test scores). Thus, $Q_{count}$ is greater than $Q_{table}$, so $H_0$ is rejected, therefore it can be assumed that there is a significant difference score of English students' listening skills which has the cognitive styles of field independent between the integrative learning model and the experiential learning model. In other words, the students who have the cognitive style of field independent and got the treatment with integrative learning model more precisely than those who received the treatment with the experiential learning model to the score of English listening students. (See table 6).

Table 6. Summary of Tukey Test Calculations

<table>
<thead>
<tr>
<th>No</th>
<th>Compared groups</th>
<th>$Q_{count}$</th>
<th>$Q_{table}$ ($\alpha = 0.05$)</th>
<th>Comparison</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$A_1B_1 - A_2B_1$</td>
<td>6.091</td>
<td>4.53</td>
<td>$Q_{hitung} &gt; Q_{table}$</td>
<td>Significant</td>
</tr>
<tr>
<td>2</td>
<td>$A_1B_2 - A_2B_2$</td>
<td>6.645</td>
<td>4.53</td>
<td>$Q_{hitung} &gt; Q_{table}$</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Thus, the research hypothesis stated that students which have a cognitive style of field independent which is given the treatment with integrative learning model is more appropriate compared with the students which is given the treatment with experiential learning model to the score of English listening student skills are acceptable. Such findings support the previous result (Azari et al., 2013; Bowman et al., 2007; Boettger & Lam, 2013; Chabbi et al., 2017;
Chabbi et al., 2017; Farooq, 2013; Flynn & Beasley, 2009; Kumar et al., 2016; Syuhida, et al, 2017) the listening skill could be integrated with the learning models and cognitive style or other in teaching and learning of a language.

The findings showed that there is an interaction between integrative learning models and experiential learning models with the cognitive style on English listening skills and the difference between the cognitive style (FI) of the students were studied with integrative and experiential learning model and who has the cognitive style (FD) were studied with integrative and experiential learning model. Therefore, the result of this research is expected that this method can be applied by teachers and lecturers in the learning process in improving the listening skill.

H$_1$ accepted means there is a very significant interaction effect between factor A (Learning Model) and factor B (Cognitive Style) or the influence of learning model on English listening skill depends on the cognitive style of the students.

4. Discussion and Conclusion

This study was conducted to determine the effect of learning models and cognitive styles on students' listening skills in English and focus on the identification, description and classification of listening learning models. The findings of this study indicate that the language learning model and cognitive style can explain the effects of the differences among the students in listening comprehension skills. The results of this study supported the findings of Omid, Omid & Behzad (2015), and Shintani & Wallace (2014), and Zanjani & Izadpanah (2016), and Khodadady & Zeynali (2012). Omid, Omid & Behzad (2015) in their study showed that cognitive styles of field independent of students had a positive and significant relationship with their translation achievement. The cognitive style of field independent is higher than the field dependents in their translation assignments and the translation performance could increase significantly. Shintani & Wallace (2014) in her study explained that (1) listening support can improve the listening skills; and (2) contextually, linguistic support has a better effect than contextual support. Zanjani & Izadpanah (2016) in their study also stated that listening strategies can be done to improve the students' listening skills. Khodadady & Zeynali (2012) mention that the results of his study show that listening skills can be influenced by cognitive styles of the students.

By comparing the results of the four studies, it can be understood that learning models and cognitive styles can not only improve the listening skills but also could help to provide an understanding of their listening. These studies explain that in order to achieve the successful in the learning process, students can do various ways to motivate themselves. Although this study has contributed and new insights to students of English in Indonesia, especially in listening material, there are also some of weaknesses. First, the purpose of this study was to examine the learning models and cognitive styles to improve English listening skills in Indonesia. Further research needs to be done to determine whether the findings of this study can be applied to English language material. Second, this research was carried out only in a limited context in Indonesia. Further research needs to be done in other contexts in Indonesia to determine the extent to which the findings of this study can be applied to other Indonesian EFL students. Third, our goal in conducting this research is not only to answer our research questions, but also to begin the process where teaching understanding of EFL students in Indonesia can be improved.

5. Conflict of Interest

There is no conflict of interest in this research
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