Motivation Strategies of Surabaya Aviation Polytechnic to Influence Cadets Listening Learning Outcomes

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ABSTRACT.
Officers involved in the world of aviation, especially pilots and ATC tower officers (Air Traffic Controllers) are required to learn the basics of English, especially phraseology, in order to communicate effectively and precisely. Over the past decade some experts have been interested in studying intrinsic learning motivation for English learning, have empirically examined the relationship between intrinsic learning motivation and various affective, behavior and cognitive variables. The aim of the study to examine the effect of intrinsic learning motivation and extrinsic learning motivation on learning outcomes of listening to cadets at Surabaya Poltekbang. Providing contributions of thoughts and experiences to teachers and researchers regarding innovative learning in listening material through cognitive, metacognitive strategies and student-centered motivation levels. This study uses the dichotomy of intrinsic learning motivation and extrinsic learning motivation to investigate the effect of motivation on the use of metacognitive strategies and cognitive strategies, while listening to oral texts among Surabaya Poltekbang cadets. The motivation of students in learning foreign languages is strongly influenced by attitude factors. Motivation in learning foreign languages is influenced by two orientations, namely integrative (attitudes towards language and community of language speakers) and instrumental pragmatic benefits that are felt in learning languages) which are greatly influenced by the values and attitudes of the community.

KEYWORDS: Motivation Strategies; Cadets Listening; Learning Outcomes

1.   Introduction

Officers involved in the world of aviation, especially pilots and ATC tower officers (Air Traffic Controllers) are required to learn the basics of English, especially phraseology, in order to communicate effectively and precisely(1). It also really helps them struggle with procedures, aircraft equipment, regulations, and others. But the use of English is often an obstacle in the world of aviation, especially for those who are not from the country with English as the main language, which is used in everyday life. Types of communication in the aviation world include verbal communication between fellow flight crews, body language, written communication (manuals, SOPs, checklists), graphics, and communication between computer systems and aircraft, especially in modern aircraft(2). The communication constraints that may be found are, understanding context, distance, hearing or visual impairment or speech, fatigue and other physical factors. In addition, the semantic constraints that may occur are accents, idioms (an expression that has different meanings from the meaning of each word for each component), ambiguity, tone of voice and technical terms(3). The challenges that arise are not only in understanding and making students the main target of changes in learning, but more than that are competencies and satisfying values. In some subjects, especially English. In learning English there is a teaching pattern and aspects that must be considered, namely, reading (reading), writing (writing), speaking (speaking), and listening (listening)(4). In terms of understanding the listening material given, the Surabaya Aviation Polytechnic (Poltebang) cadets had difficulties. The research that was carried out

stated that listening did have its own difficulties for cadets, as well as cadets at the Surabaya Poltekbang. Goh (2000) in his research said that many students had difficulty in understanding English, especially listening material(5). Some students even have difficulty understanding the teaching of English language teachers. Continued in 2008, Goh also re-examined that language material, one of which was listening, was very difficult to apply and understand both theoretically and practically(6).

Oxford (1990) in language learning strategies there are several important factors that influence the success of language students, namely motivation, gender, cultural background, attitudes and beliefs, types of tasks faced, age, and learning styles possessed. Oxford and Nyikos (2003) suggest that motivation has a large influence on the use of language learning strategies. While Kassaian and Ghadiri (2011) tried to investigate the relationship between motivational patterns and metacognitive awareness of listeners in English subjects(7). While Kassaian and Ghadiri (2011) tried to investigate the relationship between motivational patterns and metacognitive awareness of listeners in English subjects(8). From various studies indicate that there are possible methods in applying it to Surabaya Poltekbang cadets, namely the approach of educational psychology through cognitive, metacognitive strategies and intricate learning motivation and extrinsic learning motivation(9). Motivation is a change that is contained in a person to do something to achieve the goal(10). The goals to be achieved by these students are encouragement or encouragement for students to be more active in learning. Motivation to learn in the beginning is a natural tendency in humans, but then it is formed in such a way and gradually, not only as a cause and mediator of learning but also as a learning outcome itself. According to Gagne and Briggs (1992) learning outcomes are as abilities acquired by someone after following the learning process(11). Over the past decade some experts have been interested in studying intrinsic learning motivation for English learning, have empirically examined the relationship between intrinsic learning motivation and various affective, behavior and cognitive variables(12). The aim of the study to examine the effect of intrinsic learning motivation and extrinsic learning motivation on learning outcomes of listening to cadets at Surabaya Poltekbang. Providing contributions of thoughts and experiences to teachers and researchers regarding innovative learning in listening material through cognitive, metacognitive strategies and student-centered motivation levels. This study uses the dichotomy of intrinsic learning motivation and extrinsic learning motivation to investigate the effect of motivation on the use of metacognitive strategies and cognitive strategies, while listening to oral texts among Surabaya Poltekbang cadets.

2.   Method

2.1.   Thingking Framework Research

This study included the ATI (Aptitude-Treatment-Interaction) study. The roots of ATI's research can be traced to a book written by Gagne (1967) where Cronbach and others proposed theoretical reasons for such research and summarized some of the basic and applied research related to them(13). Talent is considered to include the characteristics of students who can successfully increase or decrease in the learning process as long as a treatment is given in the form of learning. Motivation, intelligence, anxiety needs for achievement are some examples of personologies that are often investigated. Treatment refers to systematic variations or learning strategies that are expected to interact with learning variables. An ATI (Aptitude-Treatment-Interaction) is defined as the interaction between individual differences between learners' abilities and the effects of various learning treatments(14). Based on the theories that have been described, then analyzed critically and systematically, so as to produce a synthesis of the relationships between the variables studied. Synthesis of the relationship of these variables, then used to form a hypothesis. A good thinking framework will explain theoretically the links between variables to be examined as illustrated in Figure 1.
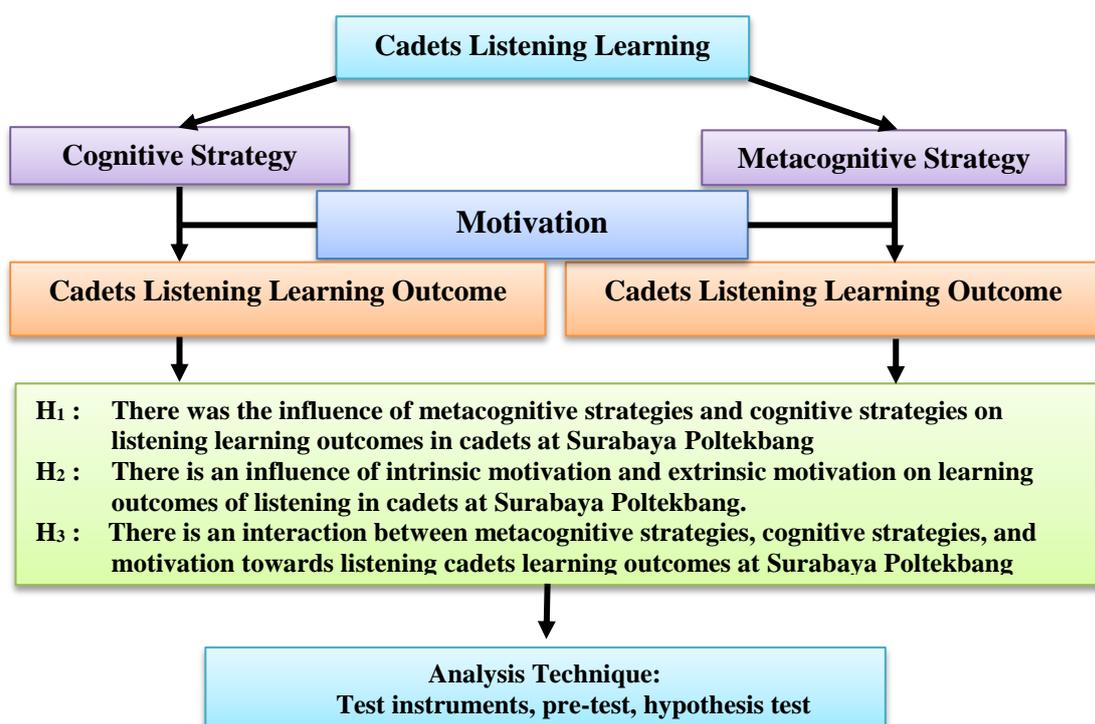
Figure 1. Thinking Framework of Influence Motivation to Cadets Learning Outcomes

2.2. *Experiment Scenario*

In conducting the experiment, the following steps are applied: provide a motivational questionnaire. Cadets are given an instrument about motivation with the aim of identifying their motivations (motivational, intrinsic, and extrinsic), carrying out experimental treatments, carrying out . listening aviation english tests/Cadets are given learning by using the prepared learning design. The learning design of listening aviation english material for cadets D.III LLU 8A in this study is a series of learning components that are used as experiments or treatments. The learning process of English listening aviation material with the learning strategies that were treated was carried out for 6 meetings. Each meeting consists of 100 minutes as shown in table 1. Based on table 1, it can be seen that handouts consist of six learning topics with one basic competency, namely Mastering listening aviation English skills both in normal and emergency conditions and applying the ability of aviation English listening. Sixth, the topic is spread in six meetings and 12 lesson hours (12 x 50 '). The total time for each strategy is 6 x 2 x 50 = 600 minutes. Each learning topic is supported by one handout containing six topics and six worksheets for cadets. The treatment in this study used metacognitive strategies and cognitive strategies. Each strategy has different stages. The learning strategy is given to all cadets who have amotivation, intrinsic, and extrinsic motivations.

Learning outcomes were obtained from evaluation activities using listening aviation learning outcomes english. This is to find out the extent to which the two strategies are able to improve the learning outcomes of English listening aviation material especially in understanding the relationship and application of skills after motivational based learning is carried out. After the experimental activities in the form of giving learning treatments for six meetings, the two groups were given an English listening aviation test. This final test aims to determine the effect of treatment in the experimental group and the control group on listening to English aviation learning outcomes on cognitive aspects (the relationship of understanding and application of skills) and the interaction of influence between independent variables and moderator variables on listening learning outcomes. The size of the learning outcome variables used in this study are cadets at level 3 semester 5 for listening aviation English courses.

Determination of research subjects or samples in quantitative research is calculated based on statistics. The subjects of this study were the parties involved in the implementation of learning in the implementation of avocation education such as at the Surabaya Aviation Polytechnic so that it can be determined that in this case the subjects in this study were cadets / cadets of the Surabaya Aviation Polytechnic. Respondents of this study consisted of Surabaya flight polytechnic cadets who participated in English Language Courses in the fifth semester.

Table 1. Treatment Scenario of Motivation Influence

	Basic Competency		
	Mastering listening aviation English skills both in normal and emergency conditions		
Meet	**Topic**	**Subject Matter**	**Time**
1	*A fire emergency*	*Aviation English , A fire emergency about communication between a pilot, a ground controller and the Fire Chief and manage a fire emergency*	2x 50'
2	*A fire emergency Aviation English Communication*	*Aviation English Communication about transmissions from pilots and ATCOs giving information about eight emergency situations and manage the pushback and taxi Air New Zealand 415 from Stand C2.*	2x 50'
3	*Aviation English approach and landing incidents*	*Aviation English approach and landing incidents. about an account of an approach and landing incident which almost ended in a runway excursion.*	2x 50'
4	*Aviation English ETOPS : Diversion at Night & Decision making and the language barrier*	*Aviation English ETOPS : Diversion at Night & Decision making and the language barrier about an account of an approach and landing incident which almost ended in a runway excursion.*	2x 50'
5	*Aviation English ILS system failure.*	*Aviation English ILS system failure account of the incident which occurred on Air New Zealand Flight NZ 60 and complete the sentences.*	2x 50'
6	*Aviation English visual references*	*Aviation English Aviation English visual references about the Airbus Flight Operations Briefing Notes of different visual and environmental phenomena which can affect pilots' perceptions during approach.*	2x 50'
	Total		12 JP

3.   Results and Discussion

3.1.   Results

Classification of motivation from research subjects was determined by comparing the highest values of the number of intrinsic motivation and extrinsic motivation. From the calculation results, it can be concluded that for the metacognitive strategy class with a total of 21 cadets, 9 cadets have intrinsic motivation and 11 cadets have extrinsic motivation. Cognitive strategy class, 9 cadets with intrinsic motivation and 12 cadets with extrinsic motivation. Learning listening results for cadets who have intrinsic motivation and cadets who have extrinsic motivation do not have the effect of learning outcomes. Midshipmen who have extrinsic motivation are more compared to cadets with intrinsic motivation. Midshipmen with the treatment of metacognitive strategies that have intrinsic motivation amounted to 9 people, more than the cadets who have extrinsic motivation, which is 12 people. Midshipmen with cognitive strategies with intrinsic motivation numbered 9 people, more cadets with extrinsic motivation totalling 13 people. Analyzed by Pairwise Comparisons in Table 2, judging from the mean difference, the comparison between intrinsic and extrinsic motivation has the same mean of 2,874. Significant between intrinsic and extrinsic motivation is 0.262 (greater than 0.05) which means

that Ho is accepted or there is no influence of learning listening outcomes between cadets who have intrinsic and extrinsic motivation.

Table 2. *Pairwise Comparisons*

Dependent Variable: HB_Listening

(I) Motivation	(J) Motivation	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
Intrinsic	Extrinsic	-2.874	2.523	.262	-7.976	2.228
Extrinsic	Intrinsic	2.874	2.523	.262	-2.228	7.976

3.2. Discussion

Surabaya Aviation Polytechnic is a higher education with a boarding school system, where the cadets are required to live in the space provided. The education system used is semi-military. Military schools are designed for academic achievement and changing behavior or improving social roles. Surabaya Aviation Polytechnic is a vocational university, which aims to prepare cadets in work. Basically vocational education prepares students to work in private and public companies so that in their learning systems, cadets tend to get motivation from outside themselves or extrinsic motivation due to demands for fulfillment of competencies. Learning listening results in cadets with extrinsic motivation have a better value than intrinsic motivation. There is a significant positive relationship between listening ability and extrinsic motivation. intrinsic. Motivation to learn in languages is different from other fields of study, even though students have a positive attitude towards language learning, but attitudes toward certain languages are influenced by perceptions of usability, gender and national stereotypes. The motivation of students in learning foreign languages is strongly influenced by attitude factors. Motivation in learning foreign languages is influenced by two orientations, namely integrative (attitudes towards language and community of language speakers) and instrumental pragmatic benefits that are felt in learning languages) which are greatly influenced by the values and attitudes of the community.

4. Conclusion

An instructor must understand more about the motivation and strategies of students and how to use them to improve their abilities, to achieve better results in language learning.. Based on the results of this study, most cadets were extrinsically motivated rather than intrinsic motivation in learning listening aviation English. Educators must help cadets to grow and increase their awareness of language learning strategies. After cadets are aware of the benefits of using strategies in their language learning process, they will be willing and appropriately using strategies to facilitate their English learning. Educators should encourage intrinsic motivation from cadets because intrinsic motivation in learning foreign languages can improve learning outcomes. Surabaya Aviation Polytechnic is an educational institution that uses a boarding school system, where cadets are required to live in a dormitory. Each cadet has different motivations in the learning process. The results of the study show that cadets have the most extrinsic motivation compared to intrinsic motivation, so that it is necessary to develop the

acquisition of intrinsic motivation from cadets who will influence the learning process. Obtaining instructional motivation can be done by applying various learning methods. So that further research is needed which is associated with the development of intrinsic motivation.

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