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Influential Factors Analysis of ICAO English Proficiency Level of Air Traffic Controllers (ATC) Officers in Makassar

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Abstract : The rapid development of instant lifestyles has significantly impacted the air transportation system. The air transportation system involves many parties, for example, facilities, infrastructure, and human resources. One of the parties that plays important role in human resources is the Air Traffic Controller (ATC). ATC playing a crucial role in coordinating air traffic and providing assistance to pilots. By seeing the importance of an ATC's duties, particularly in communicating with pilots, which requires them to use English as an international language in the world of flight, this research sought to identify the factors influencing the English language proficiency of ATC Officers at Sultan Hasanuddin Makassar International Airport. The research used interviews, documentation, and data analysis methods to gather and analyze data. The research's findings demonstrated that factors influencing the English language proficiency of ATC Officers at Sultan Hasanuddin Makassar International Airport are: a. Writing skills: 1) interest factors and 2) environmental factors. b. Listening skill: 1) interest factor. 2) vocabulary factor; 3) concentration factor; and 4) interest in the topic factor. c. Speaking Skill: 1) psychological factors and 2) grammatical factors. d. Reading Skill: 1) motivational factors. 2) language complexity factor; and 3) vocabulary factor.

Keywords: ATC, English Proficiency Level, ICAO.

INTRODUCTION

The Air transportation is currently experiencing extraordinary developments, both in terms of facilities and human resources. One of the human resources needed to support air transportation is air traffic control (ATC). The general duty of an ATC officer is to manage the movement of air traffic. ATC is the pilot's closest partner (International Civil Aviation Organization, 2001). In Indonesia, air traffic controllers work under Lembaga Penyelenggara Pelayanan Navigasi Penerbangan Indonesia (LPPNPI), which is also known as AirNav. AirNav is a state-owned enterprise specifically established by the Ministry of Transportation to be responsible for the smooth running of air traffic in Indonesia. One of Airnav's branches in Indonesia is Sultan Hasanuddin Makassar International Airport. This airport is one of the busiest and largest airports in Eastern Indonesia, after Gusti Ngurah Rai International Airport

in Denpasar, Bali. The large number of service routes means that this airport must have a good flight communication strategy so that flights are smooth, safe, and comfortable. In addition, during peak hours, communication managers feel overwhelmed when communicating. Examinations carried out by the consortium for the last three (3) years from 2019 to 2022 showed that the air traffic services provided by the LPPNPI (Ainav) Makassar were in optimal condition to ensure the smooth movement of aircraft, avoid aircraft accidents, and comply with Standard Operating Procedures (SOP), which have been approved by the Komunikasi Praktis (Practical Communications: 2015). Each communication has the following flow and components (Dwi: 2012):

1. Communicator/Sender – Sender of the message
2. Encoding - The process of compiling ideas into symbols/messages
3. Messages
4. Media/Channel – Channels
5. Decoding - The process of solving/translating symbols
6. Communicator/Receiver – Recipient of the message
7. Feed Back - Feedback, response.

On each flight, after the aircraft has taken off, been turned on, and is ready to operate, the pilot will ask permission. The plane is pushed to the point where it wants to take off. In aviation language, this is called the clamp position. So the pilot asked permission from ATC before starting the engine and getting ready to leave the aircraft apron. After completing the ATC inspection in about 10 minutes, the pilot will be asked to start the aircraft engine and clean the apron (Pemerintah Indonesia, 2018).

In carrying out communication activities, certain components or elements of the communication process must be considered so that communication goals can be effectively achieved (Salis, 2022). These factors are as follows:

1. The communicator, which is the part that starts the communication process,
2. The source is the part that sends messages to others.
3. In the communication process, a message is something that is conveyed by the sender to the recipient. Messages can be conveyed face-to-face or through the use of communication media. The message should have a core message (theme) as a guide in trying to change the attitude and behavior of the communicant. In the communication process, messages are carried out by Air Traffic Control officers with the pilot through a process of communication media.
4. Media (Channels). The media shown here is a tool used to convey messages from sources to recipients.

ATC's role is very important to achieving flight goals (Achdiat: 2019). All aircraft operations in the maneuver area must have an ATC order in advance, which will then provide information, instructions, maneuvers, and authorization to the pilot for flight safety purposes. All communication is carried out with complete equipment and in accordance with the rules (Aviasi, 2020). ATC also plays an important role in air traffic safety. The main priority is to find a regulator between the aircraft as well as the security of air traffic control officials, as well as manage traffic and soft air orders. Therefore, apart from helping prevent collisions, ATC also ensures that the aircraft's movements are smooth and safe. All of this is inseparable from the communication process, which is a series of message-sending operations to produce a response from the message recipient.

The main duties of an ATC are: 1. Prevent collisions between aircraft in the air and collisions between aircraft with obstacles in the maneuvering area. 2. Streamlining and maintaining the regularity of air traffic flow, and 3. Direct speech (DS) Direct speech, or DS, is a direct telephone tool used for airport coordination via VSAT (satellite). One other registered airport and a recording system support the direct speech (DS) used for coordination between ATC officers in order to maintain the lack of communication.

As a member country of the International Civil Aviation Organization (ICAO), Indonesia is obliged to follow all established rules relating to aviation safety, including the use of language, which is an ICAO standard. To prepare every pilot and air traffic control officer, it is necessary to have officers who have English-language certification issued by ICAO. Pilots and ATC personnel both use English as a language of communication. Therefore, the mastery of English skills must reach the minimum standard determined by ICAO (International Civil Aviation Organization, 2009).

ATC personnel are required to meet the minimum competence of IELP (ICAO English Language Proficiency) at level 4 (operational level), as stated in ICAO Doc. 9835 regarding the Manual on the Implementation of ICAO Language Proficiency Requirements. (International Civil Aviation Organization, 2010). There are six levels that ICAO has established as standards or levels (levels) that flight personnel can achieve in chapter 2 of the ICAO English Language Proficiency Standard: level 1 is the pre-elementary level, level 2 is the elementary level, level 3 is the pre-operational level, level 4 is the operational level, level 5 is the extended level, and level 6 is the expert level. The test given to flight personnel is called the IELP test. ATC personnel who have IELP level 4 (operational) certification must re-take the exam every 3 years, while for level 5 (extended), the re-examination is every 6 years. Only level 6 experts do not have to take the re-exam because they already have natural fluency. At IELP Level 4 (Operational Linguistics Level 4), there are several items that will be assessed, namely: pronunciation, structure, vocabulary, fluency, comprehension, and interaction. Therefore, an ATC must master these six items before serving at airport towers. Mastering this is certainly not an easy thing.

There are many factors that greatly affect the mastery of English by an ATC officer. Therefore, the writer is interested in conducting research with the title "Influential Factors Analysis of the ICAO Language Proficiency Level of Air Traffic Controllers (ATC) in Makassar.

METHOD

Type of Research

This research followed a descriptive research strategy. This research only had one variable; therefore, qualitative methods were appropriate. Descriptive research was chosen because it presented data in a methodical, factual, and accurate manner about the realities of the field. Descriptive research seeks to describe, explain, and answer the problems under investigation in as much detail as possible by analyzing an individual, group, or event. Humans were used as research instruments in qualitative research, and the written findings took the form of phrases or queries that were relevant to the issue at hand. The design of this descriptive research with a qualitative method sought to investigate the variables influencing the English proficiency of ATC staff at Sultan Hasanuddin Makassar International Airport.

Population and Sample

Population

The initial procedure for determining a sample was to define the population of interest. According to the sentence above, the writer ought to figure out the population before selecting the sample. In this research, the writer chose 25 ATC staff at Sultan Hasanuddin Makassar International Airport as the population.

Sample

A sample is a collection of variables, or a single element, from which data is generated. In other words, a sample is a population segment that is thought to be closest to the entire population. The writer chose 10 (ten) ATC officers as a sample for this investigation.

Location and Time of Research

This research was carried out at Sultan Hasanuddin Makassar International Airport from July 2023 to December 2023, focusing on the Air Traffic Controller unit.

Instruments

A semi-structured list of fifteen (15) questions about the English language proficiency of ATC officers served as the research instrument and used in in-depth interview process. In addition to the set of inquiries, a few aviation-related books and publications were also used to back up the research findings.

Procedure

Data collection procedures are the most fundamental stages in research, as the primary goal is to identify the most relevant data. In qualitative research, data collection techniques can be used in a variety of places and ways. This research employed both interview and documentation procedures to acquire data.

1. Interview

Interviews are a method of data collection that involves asking and answering questions directly to the item under research or to an intermediary who is familiar with the object's situation. In this research, data were collected through field research and interviews. The data was obtained by directly asking the 10 ATC officers as the samples. The interview format was semi-structured. The interview was a sort of in-depth interview that was more adaptable in its execution than organized interviews. The samples in this interview were asked to provide ATC officers' thoughts and beliefs about the abilities and factors that influenced their English proficiency

2. Documentation

Documentation has been utilized to extract information from report results and written, illustrated, recorded, or printed statements. Documentation is additionally useful throughout the interview, allowing the researcher to focus on the procedure of gathering data rather than stopping to record the subject's responses. This method was utilized to collect written information on the abilities and factors influencing the English proficiency of ATC officers.

Research Technique

The data analysis method employed was comprehensive data analysis. It was a way of analyzing data or information obtained in order to describe the elements influencing ATC officers' English language skills. The data analysis procedure consisted of various stages, including:

1. Data collection

Data collection is a process of selecting, focusing on simplifying, abstracting, and transforming data that takes place continuously during research and continues from field research until the final report is reduced. Data collection is a form of analysis that sharpens, classifies, directs, removes unnecessary information, and organizes data in such a way that conclusions can be drawn.

2. Data display;

Data display is a set of structured information that provides the possibility of drawing conclusions and taking action. Data display needs to be arranged in a simple way from complex information into an easy-to-understand form of analysis.

3. Drawing results.

Drawing results for researchers is done by looking at the results of data reduction and still referring to the formulation of the problem and the goals to be achieved. The data

that has been compiled is connected and compared with one another so that it is easy to draw conclusions as an answer to any existing problems.

RESULTS AND DISCUSSION

Result

The Factors That Affected The English Language Skills Of Air Traffic Controller (ATC) Officers At Sultan Hasanuddin Makassar International Airport:

Writing skills

Writing abilities were found to be a factor influencing the English language proficiency of Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport, according to field interviews. The following criteria have an impact on ATC officers' writing abilities:

1. Interest

The ATC officer (sample 005) at Sultan Hasanuddin Makassar International Airport provided information about interest elements during an interview. He clarified, saying, "I have never been interested, sir, in the field of writing reports using English."

The ATC officer (sample 006) at Sultan Hasanuddin Makassar International Airport was interviewed on interest aspects, and he gave the following explanation: "I am not interested at all, sir; writing is more difficult than speaking."

At Sultan Hasanuddin Makassar International Airport, during an interview with sample 007 regarding interest aspects, the ATC officer stated, "Never, sir, I do it just when I am working on reports; for my daily routine, I do not write, I just talk."

Based to the interest-related interview conducted with ATC officer (sample 008) at Sultan Hasanuddin Makassar International Airport, he clarified, "No, sir, I can not really write officially in English."

In accordance to the ATC officer (sample 009) at Sultan Hasanuddin Makassar International Airport, during an interest-related interview, "there were many mistakes after checking it on grammar after being forced to write the ATC report in English."

2. Environment

Based on environmental conditions discussed during the ATC officer (sample 010) interview at Sultan Hasanuddin Makassar International Airport, he clarified that "just in the tower and airport area, sir. My family does not speak English, sir."

Drawing from his environmental factors interview with ATC officer (sample 001) at Sultan Hasanuddin Makassar International Airport, he clarified, saying, "I speak English only when I go to the office, and when I make reports, I never speak or write in English at home."

In light of environmental circumstances discussed during the ATC officer (sample 002) interview at Sultan Hasanuddin Makassar International Airport, she clarified, saying, "Only at the airport, sir, my son never asked for help to do his English homework, sir."

Based on the interview with the ATC officer (sample 003) at Sultan Hasanuddin Makassar International Airport related to environmental factors, she explained that, "At home, I'm with my brother, but in general and business English, he cannot write an aviation report at all; he does not understand it."

According to the environmental elements discussed in the interview with sample 004 at Sultan Hasanuddin Makassar International Airport, he stated that "house no, sir; aside from being in the tower, there is nothing else that motivates me to speak English, sir."

Listening Skill

The listening skill of Air Traffic Controller (ATC) personnel at Sultan Hasanuddin Makassar International Airport are influenced by various circumstances, as revealed by in-field interviews. The following factors have an impact on ATC officers' listening skills:

1. Interest

Drawing on the interview with sample 001, an ATC officer at Sultan Hasanuddin Makassar International Airport clarified that “English aviation has its ups and downs. I enjoyed the learning method taught when I was an aviation cadet. It was really good; the lecturer was not a killer, so we enjoyed it. Exciting! Not everything was taught in depth. There should be an extra hour. There was a lot of material, but there was not enough meeting time. If you were learning conversational English, you would not forget the course, sir, because there were foreigners, so we had a project, sir, to chat directly with native speakers. At first, I was nervous, but what could I do? It was my job, so I did it. Although sometimes I did not understand the answer because he spoke so carelessly, I could still understand the meaning of the lecturer who taught English. Well, if you were a foreigner, you would talk really badly, sir. Globally, aviation English was more exciting than general English.”

Relying on the interview with Sultan Hasanuddin Makassar International Airport's ATC officer (sample 002), she clarified that "English is good for a profession like ours. In the digital age, the MEA Era means you have to be able to communicate by using English for aviation. When it comes to English conversation, it is good to train mentally, but unfortunately, I always feel embarrassed and afraid of making mistakes.”

Based on the interview with the ATC officer (sample 003) at Sultan Hasanuddin Makassar International Airport, she explained that “English is good, but I think there is not enough time. We mostly use the same aviation English, so we know it very well. Unfortunately, when we speak in general English, we become stiff and lack confidence. A general English course needs to be held because if we only rely on working hours in the tower, it's really not enough. However, general English is very important for the world of work in the aviation environment.”

During the interview with the ATC officer (sample 004) at Sultan Hasanuddin Makassar International Airport, he explained his interest in English language skills as follows: “I think my English is good, impressive, and still memorable, but it needs improvement. There was a lot of aviation English material presented, but it was not in depth. Even though I thought this material was very important, in my opinion, English conversation is good, fun, and makes ATC officers braver. At that time, we formed a team to chat directly. Then it was recorded and presented in front of ATC cadets. So my friends and I especially felt that English aviation was unforgettable. Hehehehehe.”

Based on the interview with the ATC officer (sample 005) at Sultan Hasanuddin Makassar International Airport, he explained his interest in English language skills as follows:” Learning aviation English was really fun. It was fun because this course taught how to give directions to pilots in the air and on the ground. So it was nice to have good and interesting lecturers during my days as a cadet. Each lesson had a project, so it was nervous but fun.

2. Lack of Vocabularies

Based on the interview with the ATC officer (sample 006) at Sultan Hasanuddin Makassar International Airport, he explained that “general English was frustrating. Yes, I was frustrated, especially when I was going to be tested. Many people did not understand the English vocabulary; I failed to focus, and I did not understand what it meant at all.

The ATC officer (sample 007) at Sultan Hasanuddin Makassar International Airport said that, "English conversation is not boring but easy to understand; just a little nervous, sir, especially those that are not related to the world of aviation; they are not familiar to me."

Based on an interview conducted at Sultan Hasanuddin Makassar International Airport with an ATC officer (sample 008), he clarified that, English conversation related to aviation is not boring, sir, nor are they frustrated, but there are still a lot of vocabulary

that I don't understand, sir. Sometimes it feels like the meaning of what is being said is not true. So I feel like that, sir, because of the lack of vocabulary that I have, sir. The difficulty I faced was that the accents of the pilots were very fast and sometimes I felt like it was really foreign, never having heard this vocabulary. Even though they have tried, sir, I still did not understand. I rarely hear their vocabulary, sir."

According to the ATC officer (sample 009) at Sultan Hasanuddin Makassar International Airport, He explained that that it was frustrating, not only that sometimes there were some vocabulary words that I didn't know and the pilot's accent was also very fast. So sometimes I feel like the pilot was talking really fast, hehehe.

Drawing on the conversation with Sultan Hasanuddin Makassar International Airport's ATC officer (sample 010), He explained that Sometimes I feel like I do not understand what the pilot is saying or anything related to English aviation. If you go fast, it is a bit blank, hehehehe. I am frustrated because there are a lot of new vocabularies I've heard, sir. So there I am just stuck with the sentences I had prepared from home, unable to give feedback smoothly.

3. Concentration

In response to a question about concentration, an ATC officer (sample 001) at Sultan Hasanuddin Makassar International Airport stated, "After 12 o'clock, sir, at that time I'm usually sleepy, sir." since I've already finished my meal, hehe. It's not particularly effective.

According to the ATC officer (sample 002) at Sultan Hasanuddin Makassar International Airport who was interviewed about concentration, she explained that, "In the afternoon, sir, it's really hot, hehehe. I can not focus even there is Air conditioner in the room"

The following is based on an interview regarding concentration conducted with an ATC officer (sample 003) at Sultan Hasanuddin Makassar International Airport. She stated that "In the afternoon sir, at 12 o'clock or half an hour. It is not effective at all, sir, it's hot and I am hungry at that time. I think a lot of work, so I'm getting hungrier, sir. I feel like my energy is drained, sir. Hehehe.

According to an ATC officer (sample 004) at Sultan Hasanuddin Makassar International Airport, during an interview about concentration, he said that, "More or less, after midday, sir, it is effective in the morning, sir, so it's cooler and calmer. If it's already hot in the afternoon and you're hungry, you're afraid it will make you lose focus. Hehehe."

According to the concentration-related interview with ATC officer (sample 005) at Sultan Hasanuddin Makassar International Airport, he clarified that

Speaking Skill

Speaking abilities were found to be a factor influencing the English language proficiency of Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport, according to field interviews. The following things have an impact on ATC officers' speaking abilities:

1. Psychology

According to the psychological aspects of the ATC officer's interview (sample 007) at Sultan Hasanuddin Makassar International Airport, he clarified, "I am afraid of making mistakes, sir, nervous, and always nervous when speaking."

An ATC officer (sample 008) at Sultan Hasanuddin Makassar International Airport response to a question concerning psychological aspects described that, "being nervous, Sir, if it is about general English, but if it is about English aviation, it is our daily routine"

Regarding psychological issues, the ATC officer (sample 009) at Sultan Hasanuddin Makassar International Airport stated that, "I am nervous because I am afraid of what is being said, or if my vocabulary is wrong, Sir."

Based on his psychological aspects interview with ATC officer (sample 010) at Sultan Hasanuddin Makassar International Airport, he explained that, "I am quite used to it, sir, because I have a habit of repeating the same terms from the world of aviation every day."

Due to the conversation with the ATC officer (sample 011) at Sultan Hasanuddin Makassar International Airport regarding psychological factor, she explained that, "I can do it or not; I'm doubtful, sir. I am afraid of being wrong."

2. Grammar

The ATC officer at Sultan Hasanuddin Makassar International Airport, sample 010), was interviewed regarding grammar-related issues. He gave the following explanation: "I don't know, sir, I forgot all the grammar I was taught as a cadet, but I understand the terms of the world of aviation, so I can still work in the tower."

Based on the grammar-related interview with ATC officer (sample 001) at Sultan Hasanuddin Makassar International Airport, he clarified, saying, "Sir, I know the grammar, but I don't memorize the formula for some of them. I don't know about any other tenses, sir; I only know the simple present, simple past, and simple continuous tenses."

The ATC officer (sample 002) at Sultan Hasanuddin Makassar International Airport was interviewed over grammar-related issues, and she gave the following explanation: "I don't know, sir, I've forgotten."

"Grammar is the rules that regulate sentence structure, sir," the ATC officer (sample 003) at Sultan Hasanuddin Makassar International Airport said in an interview about grammatical aspects. Examples include the present perfect tense, the simple present tense, the present continuous tense, and numerous others, sir.

Based on the interview with the ATC officer (sample 004) at Sultan Hasanuddin Makassar International Airport related to grammar factors, he explained that "there are verb-ing, verb 2, verb 3, sir, as far as I know."

Reading Skill

Based on the interviews in the field, the factors that affect the English language skills of Air Traffic Controller (ATC) Officers at Sultan Hasanuddin Makassar International Airport is reading skill. The reading skill of ATC officers is influenced by several factors:

1. Motivation

Based on the interview with ATC officer (sample 006) at Sultan Hasanuddin Makassar International Airport related to motivation, He answered the question about the last month whether he had any activities or events at the library or bookstore and the answer was: "No sir. I seldom read English text. It makes me headache."

Based on the interview with ATC officer (sample 007) at Sultan Hasanuddin Makassar International Airport related to motivation, He answered that "No, sir. "It is complicated. I am not really interested in reading English text.

Based on the interview with ATC officer (sample 008) at Sultan Hasanuddin Makassar International Airport related to motivation, He answered that "No sir, my last reading was when I was still at the Poltekbang, long time ago.

Based on the interview with ATC officer (sample 009) at Sultan Hasanuddin Makassar International Airport related to motivation, He answered that "Yes sir, I just read the airport ATC magazine, but I just looked at it."

Based on the interview with ATC officer (sample 010) at Sultan Hasanuddin Makassar International Airport related to motivation, He answered that: "No, sir. Because I am lazy to open the dictionary".

2. Vocabulary mastery

Based on the interview with ATC officer (sample 001) at Sultan Hasanuddin Makassar International Airport related to vocabulary mastery, He explained as follows: There are many new vocabularies related to general English that I do not know.

According to an interview with an ATC officer (sample 002) at Sultan Hasanuddin Makassar International Airport about vocabulary mastery, she stated, "When I read English aviation texts, I understand many vocabularies because they are familiar to me." Sir, but when I read general English texts, it is so hard for me."

English aviation texts, I often find new vocabularies, sir, but I immediately look for them in an electronic dictionary or book dictionary. I cannot stand on it if I do not look for it right away. That is cute. heheheee Aviation English, in my opinion, is a difficult language, sir.

3. Language Complexity

ATC officer (sample 004) at Sultan Hasanuddin Makassar International Airport in response to a question about language complexity said that "Yes, sir, sometimes I feel confused, especially when reading reports. Oh, I'm sorry, the language is really complex."

In regard to the language complexity interview conducted with ATC officer (sample 005) at Sultan Hasanuddin Makassar International Airport, he clarified, saying, "Yes, sir, I often feel confused about the structure of very long sentences when I'm reading, so I'm confused about what it means."

In reference to language complexity, ATC officer (sample 006) at Sultan Hasanuddin Makassar International Airport related to language complexity explained that "it depends, sir; sometimes there are sentences in the report that are too complex, so I have to think hard about the meaning."

Discussion

The Factors Influencing the English Language Proficiency of Air Traffic Controller (ATC) Officers at Sultan Hasanuddin Makassar International Airport.

Writing skill

Writing skills are one of the abilities that need to be considered in order to improve language skills. Two aspects that need to be considered to improve writing skill are interest and environment. High interest and a supportive environment, of course, made someone have good language skills. Based on research conducted on Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport, it can be concluded that ATC officers' interest in writing was still low. It can be seen from the absence of English report writing activities in the last three months, the lack of enthusiasm, and things to get used to in practicing writing in English. It can also be concluded that, so far, the environment for ATC officers that supports English language activities has been limited to conversations with pilots and several officers on the aircraft. They said that the introduction or practice of English was only done while researching while they were still cadets. Moreover, there was no environment that encouraged or supported ATC officers to learn or be more sensitive to English.

Listening Skill

In order to improve the English language skills of Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport, several factors must be considered. One of these factors is the skill to listen, or listening skills. According to Soenardi (2008), having good listening skills influences the skill to speak, the skill to read, and the skill to write. According to Underwood (1989), strong listening skills include attention to curiosity, vocabulary, focus, and topical interest. He claimed that what determines how well someone listens is classified into two categories: "physics and psychological aspects." Underwood argued that physiological aspects include resilience and awareness. Meanwhile, psychological aspects include attitudes, skills, interests, motivation, and intelligence.

Underwood stated that the interest part is unique and requires extra attention because a person's great interest affects their listening skills. Passion for a task, understanding the beginning and end goals of a learning process, and a sense of comfort with the speaker are all indicators of high interest. People who are eager to learn will eventually become conscious of the learning and working processes.

International Airport has a good appreciation of the English language, especially the aviation English they use every day. Through interviews conducted, the majority of Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport stated that they were more comfortable using aviation English compared to general English. Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport also realized that mastering general English would be very useful in their future lives, especially for their career path in the world of aviation. Several ATC officers stated that "having the skill to speak aviation and general English will make it easier to communicate actively with pilots and other officers." Others stated that "having good language skills will, of course, make it easier to face the AEC and digital era." This, of course, showed the high interest of the Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport.

Another element that must be taken into account in order to have effective listening abilities is vocabulary. There are reportedly a number of obstacles that may interfere with someone's listening skill, such as vocabulary," states Underwood (1989). Naturally, a listener with a restricted vocabulary may find it difficult to comprehend the text they are reading and may even become disinterested and frustrated. It is clear that ineffective listening abilities are demonstrated when someone is bored or even offended while listening.

Following observations with Air Traffic Controllers (ATC) at Sultan Hasanuddin Makassar International Airport, it was discovered that several ATC officers expressed frustration with the amount of new vocabulary they encountered when listening to messages sent from outside. This demonstrated the limited vocabulary that ATC officials still possessed. One's level of concentration also has an impact on their skill to listen. Underwood (1989) explains this as follows: There are also a number of factors that can make it difficult to concentrate when listening, including monotonous subjects, physical exhaustion, noisy surroundings, and excessively hot or cold room temperatures.

The Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport felt that their concentration was diminished as a result of being divided up with tasks to monitor the tower too late at night (dawn) or in the middle of the day or afternoon because they were tired. This conclusion can be drawn from the data collected from the research results. Because of the agreeable temperature and the fresher state of their bodies compared to other times of day or evening, even in the early morning, ATC officers believed that the morning was a better time to do their monitoring tasks. When ATC officials listened to the pilots' chats, they complained that heat, hunger, and fatigue interfered with their skill to focus.

Nunan (2013) stated that there are four main factors that influence message delivery in listening; one of them is interest in the topic. This factor explained how interested ATC officers were in having conversations with pilots or even fellow ATC officers on duty in the tower. An indicator that someone has interest is when that person has a strong urge to know.

Speaking skill

Speaking proficiency is the third component that affects language skill. To increase language skills, speaking abilities need to be given extra consideration. Grammar and psychology are two different factors that can affect speaking abilities. Psychological elements were the ones that affected speaking skill, according to Burns (1997). Various experts have cited psychological variables such as motivation, courage, and culture as the most crucial factors in speaking skill. It was also important to focus on the elements that impeded

speaking skills, including cultural differences, a lack of drive, nervousness, and the shame associated with giving speeches in public.

Drawing from the conducted research, it can be inferred that Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport had poor speaking skills in general English but mastered English aviation. ATC officers still experienced embarrassment and fear in dialogue at the level of general English or everyday conversation. This resulted from ATC officers' lack of confidence and their fairly restricted vocabulary, so they preferred to remain silent rather than talk or dialogue. They prefer to use regional languages or Indonesian when conducting conversations with fellow officers.

Grammar is an element that influences proficiency in a language. Burn (1997) stated that knowing various grammars was one of the barriers to someone communicating. It is in line with the findings of this research that the Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport only knew a few types of grammar. The ATC officer was only able to mention and explain simple present tense, past tense, and others. Some ATC officers replied that they did not have any idea about the tenses. This clearly showed that the grammar understanding of the Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport was still low.

Reading skill

Having the skill to read is one way to have good language skills. Reading has always been something that people do every day. However, there are several problems related to reading skill, especially reading in English. The factors that need to be considered are motivation factors, language complexity factors, and new vocabulary. Subyantoro (2011) explained that there are several types of factors that can influence reading skill, one of which is motivational factors. Alaxander in Zuchdi (2008), who claims that motivation is the factor that influences a person's skill to understand reading, further supports this. High motivation has an influence on language skills.

Motivation can be seen in how much a person wants to achieve. According to Burs in Burnes (1985), someone who has high reading motivation can be seen through the need for reading, the action of looking for reading, the feeling of enjoyment of reading, the desire to always read, and follow-up (following up on what is read). Based on research conducted by Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport, it is explained that ATC officers have low motivation to read. This can be seen in the lack of effort by ATC officers to improve their reading skills. The activities carried out by ATC officers outside working hours are more related to entertainment than reading books.

Language complexity is one of the factors that influences reading skill. According to Swan in Somadayo (2011), the cause of someone experiencing difficulty reading is sentences that have high complexity and syntactic complexity. In language, it is described as someone who has good listening skills. He is able to manage and understand the structure of language and is able to read, even though there is high language complexity. Someone with good reading skills will understand and interpret a sentence with certainty. Based on the results of interviews conducted with Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport, ATC officers were unable to fully understand the language due to their low vocabulary, so when they encountered complex vocabulary and language structures, ATC officers were still confused about the meaning of the language or message conveyed. ATC officers were also still unable to specifically state the correct language structure in general English. This was due to their habit of using aviation English more dominantly every day than general English.

The third factor that needs to be considered is related to the new vocabulary. Having a limited vocabulary would hinder reading skill effectively and efficiently. Of course, it would take longer to understand the reading. Thoha (2007) explained that having good language skills could be obtained through education, training, and experience.

In short, ATC officers still had limited vocabulary related to general English but mastered a lot of vocabulary specific to the world of aviation. ATC officers also still experienced many difficulties when receiving instructions or information from pilots who used terms that were unfamiliar in the world of aviation.

CONCLUSION

It is possible to draw the conclusion that the following variables affected the English language proficiency of Air Traffic Controller (ATC) officers at Sultan Hasanuddin Makassar International Airport based on the findings of the research and the discussion.

a. Listening Skill: 1) Interest. When they were still cadets, Air Traffic Controller (ATC) officers showed relatively little interest in the content delivered by lecturers, native speakers, or communicants. This still happens today, which makes ATCs not want to listen to English since they find it challenging. 2) Vocabulary. Officers in charge of air traffic control (ATC) still speak a small vocabulary. Although they are proficient in English aviation, Air Traffic Controller (ATC) personnel nevertheless struggle to understand statements that are linked to general English. 3) Concentration. When working during the daytime, most Air Traffic Controllers (ATC) officers experience a drop in concentration. 4) Topic. Officers in charge of air traffic control (ATC) are more interested in talking about their interactions with pilots or even ATC fellows working in the tower than they are in listening to general issues.

b. Reading Skill: 1) Motivation. Because they would rather engage in other forms of pleasure, Air Traffic Controller (ATC) personnel still have low reading motivation, particularly when it comes to reading English. 2) The complexity of the language. Due to forgetfulness and confusion, a large number of Air Traffic Controller (ATC) officers still lack basic language comprehension skills, including grammar and syntax. They struggle to complete complex sentence structures when given them. 3) Vocabulary. Officers in charge of air traffic control (ATC) have limited vocabulary. They are unable to determine the meaning of a sentence.

d. Speaking Skill: 1) Psychology. Officers working as air traffic controllers (ATCs) still lack confidence while speaking in front of an audience because they worry about making mistakes. 2) Grammatical. The grammar proficiency of Air Traffic Controllers (ATC) officers is poor. They can only describe the kind; they cannot convey the in-depth understanding of the grammar.

d. Writing Skill 1) Interest. ATC personnel are not very interested in writing. There's nothing to indicate a desire to write. 2) Environment. Air Traffic Controllers (ATC) only speak English in tower and airport locations due to a lack of support in the surrounding community neither in the home nor in other contexts is English used.

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