

# Behaviors Of Engineering Students Toward Asean Economic Community

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**Abstract:** This study aims to reveal the behaviors of Engineering students toward the ASEAN Economic Community (AEC). This research was conducted in Engineering student in Universitas Negeri Padang with a quantitative descriptive research. This research used a total sampling technique. The research procedure was carried out by distributing questionnaires to 84 active students of Engineering who had attended the Seminar on AEC. The results showed that the behavior of Engineering students towards AEC was 75.1% or included in both categories. This value shows that Engineering students have tried to prepare themselves to face AEC starting from the high level of knowledge about AEC 76.6% and their attitude towards AEC 78.83%. There are concerns that they will face the AEC, and lead to several behaviors that are more active in learning, add reading material in broadening horizons, improve the ability of hard skills and soft skills, start to join organizations, learn the cultures of other nations around ASEAN, and to take foreign language courses to make it easier to face AEC.

**Index Terms:** AEC, Knowledge, Attitude, Behavior.

## 1 INTRODUCTION

Technological developments and advances have greatly influenced human activities. The impact of these developments touches almost all parts of life globally starting from the clothing, food and shelter sectors. In addition, this development broadly also touches the education sector to the economy which refers to competition for human resources. Facing this situation, the Association of Southeast Asian Nations (ASEAN) has designed and implemented an economic integration system since 2015 (the ASEAN Economic Community/AEC). The AEC is an effort of integration between ASEAN countries to deal with globalization in the form of a free market including goods, services, investment and skilled labor that is free to move between countries in the ASEAN region. The hope is that this integration can create an area of competitive economy and wide open employment opportunities. But this is a dilemma for the people of Indonesia, on the one hand it becomes an opportunity that skilled Indonesian people can work anywhere within ASEAN and on the other hand it becomes a threat that there will be a lot of competition for skilled workers coming to Indonesia. Plus, currently Indonesia is not ready to face the AEC apart from the tourism sector [1]. Anggraeni's statement was indeed based on various reasons. Even the latest findings by Nurwardani explain that in Indonesia there is still a high dropout rate [2], low school participation rates, inadequate infrastructure, and limited infrastructure especially for education or broadly interpreted that education in Indonesia is still low and uneven [3]. Conditions become a haunting thing for Indonesia, especially in education.

Universities in Sumatera Barat Indonesia continue to improve in creating quality, competent, and ready to compete graduates. Various Departments improve the quality of their graduates, one of them is Engineering Department, Faculty of Engineering (FT), Universitas Negeri Padang (UNP). This department continues to make efforts so that graduates get good competence from time to time through the application of active learning, improving the quality and quantity of research, increasing collaboration between institutions, to collaboration with industry/companies. But the reality was quite alarming, apparently some students were worried about something. Based on interviews students after the National Seminar "The role of engineering students facing the ASEAN Economic Community", which was followed by UNP Engineering Students found variations in the answers of participants, there are those who already know AEC, but many also do not know, but many are also found to feel anxious about the existence of AEC because they feel this AEC will complicate employment in Indonesia. This states that AEC gave rise to a variety of responses from students, some stated it was natural and some stated it was a weakness because it was indicated as a concern. Some have even chosen to be more diligent in learning to prepare themselves to face this AEC or what is called a pattern of behavior/anticipatory readiness to adapt to social situations [4]. After suspected, found students who are worried about the AEC [5]. These concerns will certainly have an impact on a person's behavior depending on his attitude [6]. After the students' attitude towards AEC is revealed, the next thing that will be revealed is what students do in dealing with AEC. Reasons for student behavior will determine success or failure later in the implementation of this AEC policy. In connection with these problems, the research topic is "FT UNP Engineering Student Behavior Towards AEC."

## 2 BEHAVIOR

Behavior is an action that can be observed and measured [7]. The concept is, behavior exists in every living thing that is all human activities or activities, can be observed. But Michigan Alliance adds that there are behaviors that cannot be observed by outsiders or that are stored by the perpetrators of behavior. In general, behavior has three components [8].

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## 2.1 Antecedent

is an event or environment that triggers behavior. In this case, the presence of the AEC as a new condition with all the regulations being antecedent.

## 2.2 Behavior

is an action that can be observed and measured. In this case, the behavioral measurement activity is associated with the presence of the AEC. When someone is confronted with the AEC, how is his behavior? Does he ignore it or care about it? The goal is to see whether their activities change such as reading more books, looking for work, or improving health by exercising so that his body is healthy. That are examples.

## 2.3 Consequences

The consequence is a response to an event or environment. Then, the consequences are how people in the environment react to events that occur. For example, if a student ignores the presence of AEC as lazy in learning, then the consequence is that he will lose in AEC competition.

This is a picture of the chain of behavior ( $A \Rightarrow B \Rightarrow C$ ):

**TABLE 1.**  
*THE BEHAVIOR CHAIN*

Antecedents: The presence of the AEC provides threats, challenges and opportunities.
Behavior: students are lazy in learning
Consequences: be defeat in competition is before them

## 3 ASEAN ECONOMIC COMMUNITY

ASEAN Economic Community (AEC) It is a single market that handles goods, services, investment, and labor that is free to move from one country to another within the ASEAN region [9]. Fair, and prepared towards the global economy. AEC's main characteristics on economic development, overcoming economic and competitive development [9]. This, of course, must be supported by qualified human resources, so researchers focus on seeing studies in this AEC meeting.

## 4 RESEACH METHOD

This quantitative descriptive reseach was conducted at Engineering Department of UNP with an active student population of 84 people. This population study collected data through a questionnaire using a Likert scale. While the preparation of the questionnaire used the SWOT analysis theory and refers to taxonomy that is looking at cognitive, affective, and psychomotor.

## 5 INSTRUMENT VALIDITY

The research instrument was used after going through the validation stage of three experts (expert judgment). This is done because of limited access to populations that are carrying out practices outside the region, and in considering time and cost efficiency.

## 6 RESULT

After the study was conducted, the results obtained as table 2

**Table 2.**  
*Behavioral assessment variables towards AEC*

No	Variable	% mean	Scope
1	Knowledge about AEC	76,6%	Cognitive
2	Threat of AEC	82,3%	
3	Opportunities in the AEC	76,6%	Affective
4	Challenges Of AEC	77,6%	
5	Behavior towards AEC	75,1%	Psychomotor

In table 2, it was found that AEC is currently accepted by students in terms of good cognitive, affective, and psychomotor aspects. This result is good news for Indonesian education because the presence of AEC is not only known by students, but they have also determined their attitude and have even tried to act to find ways to face AEC as a challenge and opportunity to reach the future. Following this, the forms of behavior that students have started (table 3).

**Table 3.**  
*Indicator of behavior towards AEC*

No	Behavior Instrument	Score(%)
1	AEC keeps me motivated to study hard	78.27
2	I want to take a foreign language course	78.61
3	AEC makes me think globally	77.68
4	I am trying to find out more about the AEC	73.51
5	The presence of the AEC makes me want to actively organize	73.80
6	I asked lecturer about the AEC	65.67
7	I am not afraid of facing the AEC	71.08
8	I searched for news about AEC on the internet	75.89
9	I tried to increase relations	79.46
10	I practice hard skills and soft skills in order to successfully face the AEC	80.36
11	I study the culture of other countries to face the AEC	71.13

In table 4, there are eleven indicators of student behavior in dealing with AEC, the lowest score is "I ask lecturers about AEC" which means that not many students have asked lecturers related to AEC. While the highest score "I hone the ability of hard skills and soft skills to successfully face the AEC" which means that almost all students have begun trying to act to hone the ability to successfully face the AEC.

## 7 DISCUSSION

### Knowledge of AEC

A score of 76.6% for indicators of knowledge. AEC states that Engineering students already know AEC. This shows that the briefing on AEC in the form of a seminar was effective in increasing knowledge about AEC and can help prepare the public's knowledge about AEC.

### Understanding of Threats in the AEC

Score of 82.3% for the threat indicators in the AEC states that most students feel threatened by the presence of the AEC. On the other hand, it was found that the high level of student knowledge about AEC illustrates to students that there are many threats that come if they do not prepare themselves with the best provision.

### Understanding of Opportunities in the AEC

The score for the opportunity indicator in AEC is 76.6% which shows that most students understand the opportunities behind

the AEC's presence. Some of them feel that AEC is present to provide job opportunities and opportunities to work in other countries (within ASEAN).

### Understanding of the Challenges in the AEC

Score of 77.6% for indicators of understanding the AEC challenges shows that students see many challenges from the AEC's presence. So they feel challenged to increase learning creativity and develop expertise.

### Behavior Towards AEC

Score of 75.1% for indicators of behavior towards AEC shows that there have been efforts from students to act in the face of AEC. Some of the behaviors found include;

- Most of the students are motivated to study more diligently because he wants to successfully face the AEC with a score of 78.27%. These results prove that the presence of AEC is not a scary thing, but rather a positive thing that increases student motivation to be more diligent in learning.
- The presence of AEC causes students to take foreign language courses with a score of 78.61%. This indicates that students realize that the mastery of foreign languages (English) is one of the capital to be able to compete in the ASEAN and global scope.
- The presence of AEC makes students think globally with a score of 77.68%. This indicates that AEC is not something that makes students depressed, but its presence gives students the urge to expand their minds globally.
- Most students try to find out more about AEC with a score of 73.51%. This means that there are already active behaviors of students welcoming the arrival of the AEC. Students have begun to find out information about the AEC in order to be able to recognize and be ready to face it.
- Most students want to actively organize in an effort to face the AEC with a score of 73.80%. This indicates that the presence of AEC has made students determine their attitude and want to develop themselves through student organizations.
- Most students ask lecturers about the AEC (65.67%). This indicates that there has been an active student behavior in the form of asking the lecturer in an effort to dig up information about the AEC.
- Most students said they were not afraid to face AEC (71.08%). This shows that students have determined attitudes that will support their behavior as agents of change who are ready to act fearlessly, especially in dealing with AEC.
- Most students have been actively behaving to find information about AEC on the internet (75.89%). This indicates that student behavior in dealing with AEC has touched the realm of independent active learning, and this shows that the current condition of students is largely responsive to environmental conditions.
- Most students try to increase relations as a form of active behavior in order to successfully face AEC (79.46%). This behavior shows that students have realized that in order to face AEC it is not enough to only master intrapersonal skills but also interpersonal skills are needed.
- Most students hone the skills of hard skills and soft skills to successfully face the AEC (80.36%). This shows that the behavior of students facing AEC has become a

comprehensive strategy because they have seen this AEC is no longer a matter of course. They considered it necessary to prepare themselves with hard skills and soft skills to face the AEC.

- Most students learn various cultures of other countries so they can easily face the AEC (71.13%). This indicates that the presence of the AEC has indeed made students try to prepare themselves for success in facing it, and some have even tried to start searching for and studying other countries' cultures. This is certainly related to tolerance of cultural values to maintain cooperative relations between countries that interact with each other in the AEC and globally.

Most students already know the AEC and even have shown an attitude that is a concern about challenges, opportunities, and threats from the presence of the AEC. After searching, it turns out that most students have also shown behavior in their efforts to face the AEC. Although the behavior is only limited to the behavior for itself, but this has become good data for Indonesian education. In general, they have tried to have increased ability in their field of expertise, have seen the capabilities of hard skills and soft skills, trained themselves to increase relations, even to the point of wanting to take part in foreign language training and learn the culture of other nations throughout ASEAN. The results of this study are in line with Fernandes' findings on students' perceptions of the AEC, namely the average student has begun to prepare himself to face it [10]. This study also supports Nurhasan Syah's research on the attitude of Engineering students towards AEC with the finding that many students feel concerned about AEC [5]. The results of this study differ from Anggraeni's findings in 2014 which stated that in general Indonesia was not ready to face the AEC [1]. However, this research confirms that there is already a real behavior of students trying to develop themselves and improve quality so that it is easy to face AEC such as being more diligent in studying, taking foreign language courses, expanding horizons, starting to follow various organizations in honing hard skills and soft skills, independent learning, even learning culture nation as a form of efforts to add insight in the form of tolerance readiness in the AEC free market.

## 8 CONCLUSION

The conclusion of this study is that the presence of AEC was already known by the students of Engineering FT UNP. After being measured, the knowledge of Engineering students towards AEC was 76.6%. Not only knowing, Engineering students had already determined their attitude towards AEC with a score of 78.83% or with the understanding that it turns out they felt anxious and worried about the presence of AEC. The concern turned out to have an impact on student behavior with a score of 75.1%. This is good data to be known by Indonesian education that it turns out that Engineering students have responded to the presence of AEC in the form of behavior including behavior for self-development and improving self-quality so that it is easier to face AEC such as more diligent in learning, taking foreign language courses, expanding horizons, starting participating in various organizations in honing hard skills and soft skills, independent learning, and even studying national culture as an effort to add insight in the form of tolerance readiness in the AEC free

market.

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