CHAPTER I
INTRODUCTION

A. Background of Study

Teaching is a complex process which can be conceptualized in number of different ways. Traditionally, language teaching has been described in terms of what teacher do: that is, in terms of the action and behaviors which teacher carry out in the classroom and the effect of these on learners.¹

Teaching is guiding and facilitating learning, enabling the learner to learn, setting the conditions for learning.²

Based on above statement, it can be said that teaching which do by teacher can give effect in the classroom. Teacher have important role in classroom. The teacher manages the class, convey the material to students, and influence the students to learning English.

The motivating student is the one of teacher’s role in classroom. When teacher interaction in classroom with the students, the teacher can suggest the student or stimulus or impulse that is in student to do exactly what student wants, include get good value.

Attribution theory is important in understanding how students interpret and use feedback on their academic

achievement, and suggest to teachers how they should provide feedback that cause huge motivation for students.³

Motivation become an important part of teaching and motivate the student is task the teacher, moreover subject of English. Remember that English is difficult to learn in Indonesia.

English is learned in Indonesia by talking about the grammatical rules of English and error are always corrected. For language learners in Indonesia, where English is not spoken in the society, accuracy is really the focus in learning English.⁴

Sometimes, student down when learn English because they can not understand the vocabulary, the student can not identify the grammar in sentence because the grammatical in Indonesia language and English language are different. Student’s pronunciation is not good and the student is not self-confidence when speak English.

The goal of motivation is to move or inspire someone to the desire and willingness to do something so as to obtain results or achieve certain goals. For a teacher, motivational goal is to excite or stimulate the students to the desire and willingness to improve their academic achievement in order to reach the goal of education as expected and it is set in the school curriculum.⁵

Motivation can influence student’s achievement and student’s motivation can be seen from their achievement. The

³ Sri Esti Wuryani Djiwandono, Psikologi Pendidikan, (Jakarta: PT Grasindo 2002), p. 337
⁴ A.g Bambang, Teaching English As A Foreign Language, (Yogyakarta: Graha Ilmu, 2006), p. 21
⁵ M Ngalim Purwanto, Psikologi Pendidikan, (Bandung: PT. Remaja Rosda Karya 2007), cet 1, p.73
teacher can motivate the student through communicate with the student and the teacher do proximity with their student.

In education, an issue that confronts many teacher in classroom is how much they themselves should talk, and what kind of talk this should be. Of course there are times when teacher have to take the roll or ask for quiet, or suggest that students should get into pairs and group. But there are also times when teachers simply talk to groups, engage in conversation with them, discuss the topic under consideration or ask them about their weekend, etc.  

It can be said, in education the teacher does interaction with their student. The teacher does not only give material of English but also the interaction does interaction, this thing can make the student enjoy with their teacher.

Today, language teaching is not easy categorized into methods and trends. Instead, each teacher is called on to develop a sound overall approach to various language classrooms. This approach is principled basis upon which the teacher can choose particular design and techniques for teaching a foreign language in a particular context.

Besides it, there are several approach which investigated by Johnson.

Johnson investigated the beliefs that thirty ESL (English Second Language) teacher held about second language teaching and found that they had three different approaches, that is a skill based approach (which focuses on the discrete skills of listening, speaking, reading, and writing), a rule-based (which emphasizes the importance of...  

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of grammatical rules and a conscious understanding of
the language system), and function based approach
(which focuses on interactive communication and
cooperative learning, and ability to function in real
social situation). 

Three different approaches show that the teacher does
interaction and makes relationship with the student through
communication, create interactive situation and build the real
social situation in class. This thing makes the good relationship
between student and teacher.

In fact, in Indonesia, research on teacher-student
interpersonal relationship is scare.

Based on statement above, can be said relationship
between teacher and student is less good. The student is scare to
teacher. This situation make student suppressed when learn,
the student is afraid ask to teacher, the student afraid to give
opinion, the student is not self-confidence and make teaching
and learning process do not communicative. Moreover, to
English teacher who should be act interaction and use
communicative method when English teaching in order the
student active in class.

The teacher does not use thirty ESL (English Second
Language) teacher held about second language teaching

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whereas it is important to teaching language include English Language.

As the above description that is about English teacher interpersonal behavior and student learning motivation. So, the researcher interested to arrange research with the title of “The Correlation Between Students Perception on English Teacher Interpersonal Behavior and Their Learning Motivation” (The correlation study at SMK Al-Mubarok Kota Serang in second grade).

B. Identification of The Problem

Based on the information above the researcher identifies the problem:
1. The student is scare to teacher.
2. Teaching and learning process do not communicative.

C. Limitation of Problem

The problem of the research is about teacher interpersonal behavior in student’s learning motivation. This research will focus about the interpersonal behavior of teacher in the student motivation.

D. Research Question

The writer formulates of the statements of the problems are the follow:
1. How is teacher interpersonal behavior at SMK Al-Mubarok Kota Serang?
2. How are students learning motivation at SMK Al-Mubarok Kota Serang?
3. How does correlation between teacher interpersonal behavior and students learning motivation?

E. Objective of The Study

The writer focuses on some objective as follows:

1. To find out how the teacher interpersonal behavior at SMK Al-Mubarok Kota Serang.
2. To know student’s learning motivation at SMK Al-Mubarok Kota Serang.
3. To find out a correlation between teacher interpersonal behaviour and student’s learning motivation.

F. The Significant of The Research

There are two categories the benefits of the research are:

1. Researcher
   Researcher gets good understanding about teacher interpersonal behavior on student learning motivation.

2. Teacher
   a. Teacher gets some basic information about student.
   b. This research provide information for the teacher interpersonal behavior and what should be done as further implication of teacher interpersonal behavior.
   c. This research expected in order teachers who have been good behavior as the teacher have to can teach their students better than before and develop themselves in order to perform their best in the classroom.

3. Student
   a. The student can understanding about teacher characters.
b. This research expected in order the student have self confidence and student motivated to learn English without shy or scare to their teacher.
CHAPTER II
THEORETICAL FRAMEWORK

A. Teacher Interpersonal Behavior

1. Definition of Teacher Interpersonal Behaviour

Behavior is the process of interpreting experiences in consciousness by virtue of an act; action is a type of behaviour where meaning is created by visualizing the projected act in the future.\textsuperscript{10}

Behaviour which is related overtly, consciously, ethically, or symbolically to another human being (real, collective, or imagined) is interpersonal.\textsuperscript{11}

Behaviour is a set or an act of a person who looks on a person's personality is shown. According to Sullivan personality is the "relatively enduring pattern of recurring interpersonal situations which characterize a human life." To understand a person is to have knowledge of the interpersonal techniques that he employs to avoid or minimize anxiety and of the consistent pattern of relationships that he integrates as a result of these techniques.\textsuperscript{12}

Interpersonal Behaviour produces an interaction in an individual with other individuals. Interactions that occur display

\textsuperscript{10} Jonathan H. Turner, \textit{Face To Face: Toward a Sociological Theory of Interpersonal Behavior}, (Stanford, California, Stanford University Press, 2002), p. 10
\textsuperscript{11} Timothy Leary, Interpersonal \textit{Diagnosis of Personality A function Theory And Methodology For Personality Evaluation}, (California: A Division of Wipf and Stock Publishers 2004), p. 4
\textsuperscript{12} Timothy Leary, Interpersonal \textit{Diagnosis of Personality A function Theory And Methodology For Personality Evaluation}, (California: A Division of Wipf and Stock Publishers 2004), p. 8-9
an image in a person. How does one relate to others, how personal behaviour shown in public, and the way a person communicates. Then other people can assume that someone interpersonal behaviour that show.

Similarly, a teacher, who communicate and interact with the students during the learning process. A teacher also has a set of behavior displayed during teaching and learning process takes place.

The teacher is a professional educator with a primary task of educating, teaching, guiding, training, assess, and evaluate students on formal education.13

Teacher uses many metaphors to describe what they do. Sometimes they say they are like actors because ‘we are always on the stage’. Other think they are like orchestral conductors ‘because I direct conversation and set the pace and tone’. Yet others feel like gardeners, ‘because we plant the seed and then watch them grow’. The range of images – these and others – that teachers use about themselves indicate the range of views that they have about their profession.14

Simon and Boyer describe teaching behaviours such as planning, class management, evaluation, and the like.15

Doyle stressed the importance of teacher interpersonal behaviour in relation to classroom management.16

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13 Sudarwan Danim, Profesionalisasi dan Etika Guru, (Bandung: Alfabeta 2013), p.17
Of the theories contained in the above, it can be interpreted that the teacher interpersonal behaviour is a behavior which produces a teacher interpersonal relationships through the approach or communication made by the teacher to the students during the learning process. This includes how teachers manage the classroom.

Teacher displays his personal behaviour during the learning process so that the left image to the student. Image attached to the teacher produces interpersonal perception.

2. The process of formation of interpersonal perception

Interpersonal Perception is the process of formation of impressions or meanings carried by an individual toward another individual or another person through the process of interaction between the two. Interpersonal behaviour one can be seen from an individual when they show their personal interaction process takes place so that someone or interlocutor gives perception of the person's interpersonal behaviour.

Kelley (In Taylor, et al., 1994) has stated that interpersonal perception involves efforts to form impressions of others by combining different information about something good through physical appearance, words or actions. A similar sentiment was expressed by Matsumoto (1996) that interpersonal perception shows the process of forming an impression of the stimulus which involved in the interaction process.17

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It can be said that, interpersonal perception of a response or responses to stimuli (verbal and nonverbal) so the formation of a impression that functions to regulate and facilitate social relations. The interpersonal process is involving all aspects of personal as thoughts, feelings, experiences, and social situation behind the stimulus.

According to Brehm and Kassin, impression formation can occur in two ways, are:

(1) Stimulus received through observation or assessment obtain attribution, management or disposition, and interpretation are integrated with all aspects that influence the perception and private persons involved in the process of interaction.

(2) Stimulus creates an impression received directly through momentary assessment without attribution process, disposition, and integration.\(^\text{18}\)

It can be said that a person can perceive another person by assessing and reviewing the overall through personal aspects of a person show when performing interactions. In fact one can perceive interpersonal someone directly only with momentary assessment without examining interpersonal behaviour shown to others when the interaction takes place.

Perception of one individual with another individual of the same individual as an object of interpersonal perception would be different. Such an individual judge or pass judgment on others by way of examining the interpersonal behaviour of others during the process of interaction takes place. When other people judge others (interpersonal perception with the same

object) to provides an assessment only directly without examining interpersonal behaviour during an interpersonal behaviour. This will lead to differences in the perception of the individual despite the perceived are the same person.

It is also recognized by Brehm and Kassin that although the observed stimulus is the same person but in a social situation or circumstances underlying the different behaviour of the person, then the results may also differ perception.

3. Factors that influence the Interpersonal Perception

Kelley has stated that there are two factors that affect the perception of interpersonal namely:

(1) Physical and Psychological Factors
Physical and psychological factors such as the impression of physical appearance (facial expression, eye, posture), feelings, moods, emotions, and nonverbal information is an important factor in perceiving.

(2) Background personality behind the physical appearance of a person, such as the nature, motives, and the inclination or interest someone.  

Physical and psychological factors can attract someone to perceive an individual. The outside view someone show an individual appeal. Feeling, mood, emotion, and determine the perception of interpersonal nonverbal information to others. When an individual interacts with other individuals with a sense of calm, good mood, emotionally stable, non-verbal information such as gestures or smiles, view of eye, then the other person

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may perceive that the interpersonal behaviour of the individual is a friendly person. Different thing if a person interacts in a state of chaotic feeling, the mood is not good, emotionally unstable, and nonverbal information such as sullen, will make an individual perceives that the interpersonal behaviour of the individual is not friendly.

In the MITB, teacher–student interpersonal behaviour is mapped in a two-dimensional co-ordinate system. The dimensions are called Proximity (Cooperation–Opposition, CO) and Influence (Dominance–Submission, DS). Proximity refers to the degree of teachers’ co-operative/friendly behavior, while Influence represents the degree of teachers’ control/dominance shown to students. Each quadrant of the co-ordinate structure represents two segments of behaviour. The sectors are variedly defined depending upon the degree of determined behaviors.  

The eight sectors of the MITB are:

1. Leadership.
2. Helpful/Friendly.
3. Understanding.
4. Student Freedom.
5. Uncertain.
6. Dissatisfied.
7. Admonishing.
8. Strict.

Leary believes that the way humans communicate is indicative of their personality. Along with other psychologists, he feels that the most important forces driving human behavior

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are the reduction of fear and corresponding maintenance of self-esteem. When people communicate they therefore consciously or unconsciously choose behaviors which avoid anxiety and allow them to feel good about themselves.\(^{22}\)

Personality also make an individual perceives the interpersonal behavior of other individuals by assessing a person's personality during the process of interaction occurs, see how someone being continuously toward others when communicating.

Same is the case for students who perceive their teacher interpersonal behaviour. Students perceive the behaviour of the teacher to see how the teachers interact with them, and how the teacher has approached the students. Interpersonal perception is that occur in students towards their teachers depending on their teacher behaviour displayed during the process of interaction in the learning process.

**B. Student’s Learning Motivation**

1. **Definition of Learning Motivation**

   Marion Williams and Richard Burden suggest that motivation is a state of cognitive arousal which provokes a decision to act as a result of which there is sustained intellectual

and/or physical effort so that the person can achieve some previously set goal.\textsuperscript{23}

Motivation is a quantity that people have in varying degrees and, if they have enough of it, their intellectual performance will fully reflect their cognitive abilities.\textsuperscript{24}

Sertain has stated that in general, a motivation or encouragement is a complex statement in an organism that directs behaviour toward a goal or incentive.\textsuperscript{25}

Motivation involves processes that energize, direct, and sustain behavior. Thus the behaviour of containing energy has a direction, and can be maintained.\textsuperscript{26}

Broadly defined, motivation is indicated by the intensity (or energy), direction, and persistence of a goal-directed behaviour or action.\textsuperscript{27}

From the definition above motivation, it can be said that motivation is a stimulus that arise in a person's wishes and act upon certain objectives that an individual's desired goals can be achieved.

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\textsuperscript{25} M. Ngalim Purwanto, \textit{Psikologi Pendidikan}, (Bandung: PT Rosdakarya 2011), 25\textsuperscript{th} ed p. 61
\textsuperscript{26} John w. Santrock, \textit{Educational Psychology}, (Jakarta: Salemba Humanika 2008), 3\textsuperscript{rd} ed, p. 199.
\end{flushright}
A child, or relation in the world of education that a student also has a set of motivation in itself, especially on motivation to learn.

Learning is a relatively permanent change in a behavioral tendency and is the result of reinforced practice.\(^{28}\)

Hilgard and Brower argues that the study related to changes in a person's behaviour towards something specific situation caused by repeated experiences in that situation where a change in behaviour could not be explained or basic tendencies innate response, maturity, or circumstances moment someone (such as fatigue, the influence of drugs, and so on).\(^{29}\)

According to M. Ngalim Purwanto learning is a change in behavior, which changes it can lead to better behaviour, but also it is likely to lead to more bad behaviour. The other definition of M. Ngalim Purwanto that behaviours learned because changes related to various aspects of physical and psychological personalities, such as: changes in understanding, solving a problem or thinking, skills, qualification, habits, or attitudes.\(^{30}\)

It can be said that learning is a process of change in a person's behavior or skills through some event or experience that he received continuous or repeated and specify a condition or cause a reaction in which a person's behaviour can change for the better or worse.


\(^{29}\) M. Ngalim Purwanto, *Psikologi Pendidikan*, (Bandung: PT Rosdakarya 2011) 25\(^{th}\) ed, p.84

Breaking down the components of the definition of learning, we can extract, as we did with language, domains of research and inquiry:

(1) Learning is acquisition or getting.
(2) Learning is retention of information or skill.
(3) Retention implies storage systems, memory, cognitive organization.
(4) Learning involves active, conscious focus on and acting upon events outside or inside the organism.
(5) Learning is relatively permanent but subject to forgetting.
(6) Learning involves some form of practice, perhaps reinforced practice.
(7) Learning is a change in behaviour.\(^{31}\)

Learning motivation is wish to be better to get something like the good value, get knowledge, to be more active and focus in learning especially when the student learn in class, get new information, dig knowledge and skill, change the behavior can be better and make the student act to learning.

2. The Kind of Motivation to Learn

One important factor in student motivation and achievement is their perception of their positive relationships with teachers.\(^{32}\)

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\(^{32}\) John w. Santrock, *Educational Psychology*, (Jakarta: Salemba Humanika 2008), 3\(^{th}\) ed, p.203
Attribution theory is important in understanding how students interpret and use feedback on their academic achievement, and suggest to teachers students.\(^{33}\)

As Graham summarises, the most common attribution in school environments are:

(1) Ability  
(2) Effort  
(3) Task difficult  
(4) Luck  
(5) Mood  
(6) Family background  
(7) Help or hindrance from others.\(^{34}\)

The kind of motivate students can be divided into two kinds of which the intrinsic and extrinsic.

(1) Intrinsic motivation  
Intrinsic motivation is the case and the circumstances that come from within the students themselves who can push it take action learning. Including the intrinsic motivation of students is feeling the need to please the material and the material, for example for the future life of the students concerned.

(2) Extrinsic motivation  
Extrinsic motivation is coming from outside the state of individual students are also encouraged him to conduct learning activities. Praise and reward, school disciplinary rules paragon of parents, teachers, and so on are all concrete examples of extrinsic motivation that can help students to learn.\(^{35}\)

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CHAPTER III
RESEARCH METHODOLOGY

1. Method of Research

Research method is a series of research or implementation activities based by assumptions, views philosophical and ideological, questions and issues faced.\(^{36}\)

The method used in this study is a correlation with quantitative approach. According to Nana Syaodih Sukmadinata research of correlation is the research showed to know the relation with some variable and other variable. Correlation between one variable with several variables are with mulberry of coefficient correlation and significance in a statistic manner.\(^{37}\)

2. Place and Time Research

1. Place of Research

Location of the research is in SMK Al-Mubarok, exactly at Jalan KH Abdul Latif No. 07 Village of Cimuncang Serang District of the City. Serang, Banten which is one of the educational institutions include English as one of the subjects at school with teachers who assist in the learning process. This prompted the authors to jump directly to the field and examine the process of education.

2. Time of Research

a. submission of title : 17\(^{th}\) February 2015

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b. Research: Research will be carried out for 4-6 months starting after the first proposal guidance until completed

3. Population and Sample

1. Population

Population is the generalization region consisting of the objects/subjects that have a certain quantity and characteristics set by the investigators to be studied and then drawn conclusions.  

2. Sample

The sample is a portion of the characteristics possessed by the population.

The sample is a portion of the population that can represent and reflect the nature of the population.

Amount of students in SMK Al-Mubarok are 27 students, so researcher use like as according to Suharsimi Arikunto that the subject is less from 100, so it can be better if the subject take it all until the research is research of population, furthermore if amount of subject more than 100 so it can be taken between 10-15% or 20-25%.  

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38 Sugiyono, Statistika untuk Penelitian, (Bandung: IKAPI, 2007), p. 55
39 Sugiyono, Statistika untuk Penelitian, (Bandung: IKAPI, 2007), p. 56
40 Sumanto, Teori dan Aplikasi Metode Penelitian, (Jakarta: PT. Buku Seru, 2014), p. 159
41 Suharsimi Arikunto, Prosedur Penelitian, (Jakarta: ineka Cipta, 2006), p. 118
4. **Instrument of Data Collecting**

One of the important in this research is the collecting data, that can determine the result of the research. The techniques of collecting data used in this research are:

a. Observation

The writer visited SMK Al-Mubarok to research about topic which is related to the subject in this research.

b. Interview

Interview is a form of verbal communication. This technique was done to get data and information from student and teacher, which are needed for the research.

c. Questionnaire

Questionnaire is a number of written questions that are used to obtain information from respondents in terms of personal or reports about the things he knew.

In this research, the researcher uses the questionnaire which design by self.

5. **Determination Hypothesis**

In this research to provide answers to the problems that are being studied to be filed null hypothesis and the alternative hypothesis. If the null hypothesis is rejected means alternative hypothesis is accepted, whereas if the null hypothesis is accepted then the alternative hypothesis is rejected.

The hypothesis that the authors propose is as follows:

\[ H_0 = \rho_{xy} = 0 \]

= Means there is no correlation between the perception of students in interpersonal behaviour and motivation to learn them.
H_a = rxy > 0 = There is the correlation between the perception of students in Interpersonal behaviour and motivation to learn them.

6. **Technique of Data Analysis**

In this research, the data were analysis by means of drawing conclusion from the data of:

1. **Qualification Data**

   From the results of questionnaire, before the first qualifying analyzed with a Likert scale, as follows:

   1) The Answer of a (always) be given a score of 5.
   2) The Answer b (often) given a score of 4.
   3) The Answer c (Sometimes) were given a score of 3.
   4) Answer d (Ever) were given a score of 2.
   5) Answer e (Never) was given a score of 1.

   a. Use of the data result of questionnaire.

   b. Use the range with formula:

   \[ R = X_{\text{max}} - X_{\text{min}} \]

2. **Determine many classes with the formula:**

   \[ K = 1 + 3.3 \log n \]

   Note:

   \[ K = \text{The amount of class.} \]

   \[ n = \text{The number of data (Frequency).} \]

   3.3 = Numbers constant.

3. **Determining the length of the class with the formula:**

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42 Subana, Statistik Pendidikan, (Bandung: Pustaka Setia, 2000), p. 38
\[ P = \frac{R}{K} \]

Note: 
- \( P \): The length of the class.
- \( R \): Range (Range)
- \( K \): The amount of class

4. Using a frequency distribution table

5. Create graphs histogram and polygons.

6. Analysis of central tendency (the size of the central symptoms) in a way:

   1) Calculating the mean of the formula

   \[ \bar{X} = \frac{\sum f_i x_i}{\sum f_i} \]

   2) Calculating the median of the formula

   \[ M_c = b + P \left( \frac{n-F}{f} \right) \]

   Note: 
   - \( b \): Lower limit of the median class
   - \( p \): Length class
   - \( n \): The number of data
   - \( F \): The number of times before the median class
   - \( f \): The frequency of the median class

   3) Calculating modus by formula

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Subana, Statistik Pendidikan, (Bandung: Pustaka Setia, 2000), p. 40
Sudijono, Pengantar Statistik Pendidikan, (Jakarta: Rajawali Press, 2010), h. 85
Subana, Statistik Pendidikan, (Bandung: Pustaka Setia, 2000), p. 72
\[ M_o = b + P \left( \frac{b_1}{b_1 + b_2} \right)^{47} \]

Note:
- \( b \) = Lower limit of the modus class
- \( P \) = length class
- \( n \) = The number of data
- \( b_1 \) = frequency mode of reduced frequency class before class
- \( b_2 \) = frequency mode of reduced frequency of classes next class

4) Determine the standard deviation with the formula:

\[ SD = \sqrt{\frac{\sum f x^2}{N}}^{48} \]

Note:
- \( SD \) = Standard Deviation
- \( \sum f x \) = Number of the multiplication of the frequency of each score with a score that has been squared deviation.
- \( N \) = Number of data

5) A test of Normality

\[ Z = \frac{x_i - x}{SD} \]

Note:
- \( x_i \) = Value limit class
- \( x \) = Value of mean

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SD = Value of standard deviation

6) Search value of $X^2$ (Chi Kuadrat) with the formula:

$$X^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Note: $O_i$ = Frequency of observation, that is in many data which into a interval class

$E_i$ = Frequency of expectation = $n \times$ luas Z table

7) Correlation analysis (Product Moment)

a. regression analysis

$$\hat{Y} = a + b \times$$

$$a = \frac{(\sum x^2)(\sum y) - (\sum y)(\sum xy)}{N(\sum x^2) - (\sum x)^2}$$

$$b = \frac{N\sum xy - (\sum x)(\sum y)}{N(\sum x^2) - (\sum x)^2}$$

8) Correlation analysis

$$r_{xy} = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{(N\sum x^2 - (\sum x)^2)(N\sum y^2 - (\sum y)^2)}}$$

Note:

$r_{xy}$ = The number correlation index

$N$ = The number of data

$\sum xy$ = The amount of the multiplication of the score x and y.

$\sum x$ = The total of all scores x.

$\sum y$ = The total of all scores y.

There is the other way which researcher do to examine hypothesis, as follow:
a. Determine the correlation significance, with formula:
\[ t = \frac{r \sqrt{N-2}}{\sqrt{1-r^2}} \]
Note:
\[ t \] = Significance level
\[ r \] = Figures correlation index
\[ N \] = Number of data

b. Determine the contribution of variable X to variable Y by the formula:
\[ C_d = r^2 \times 100\% \]
Note:
\[ C_r \] = Coefisien determination.
\[ r \] = squared correlation indices.

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### Lattice research instrument

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rating</th>
<th>Indicator</th>
<th>Item question</th>
<th>Total</th>
</tr>
</thead>
</table>
| Teacher Interpersonal Behaviour (Variable x) | a. Social relationship  
  b. Stimulus  
  c. Class management  
  d. behaviour | a. Establish social relationships with students in the classroom and outside the classroom.  
  b. Provide a stimulus to the students in the process of teaching and learning.  
  c. Class management match with planning.  
  d. Display behaviour that suits the atmosphere of learning classes | 1, 2, 3 | 3 |
| Students Learning Motivation (Variable y) | a. achievement  
  b. Spirit  
  c. Discipline  
  d. Paragon of teacher | a. Improving achievement  
  b. Discipline in learning and time  
  c. Spirit to learning English  
  d. Paragon of teacher to learn English | 1, 2, 3 | 3 |
CHAPTER IV
RESEARCH FINDING

A. Analysis of Teacher Interpersonal Behaviour

1. Use the result of data questionnaire

To determine and know about the English teacher interpersonal behaviour (Variable X) and how about English teacher interpersonal behaviour in SMK Al-Mubarok Kota Serang researcher gives questionnaire (the amount questions of questionnaire are 10 item questions) to students in second grade which the amount of 27 people and the result of questionnaire from students can be seen in Table 4.1.

| TABLE 4.1 |
| Recapitulation result of questionnaire |
| Variable Score Data English Teacher Interpersonal Behaviour |
| (Variabel X) |

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<thead>
<tr>
<th>No</th>
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<tbody>
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<td>8</td>
<td>3 2 5 4 3 5 3 3 5 3</td>
<td>36</td>
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</tbody>
</table>
The result of data about English Teacher interpersonal behavior (Variable X) with the total respondents are 27 students, based on the lowest value and the highest value, as follows:

<table>
<thead>
<tr>
<th></th>
<th>9</th>
<th>5</th>
<th>3</th>
<th>3</th>
<th>5</th>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>33</td>
<td></td>
</tr>
</tbody>
</table>

2. Use Range

\[
N = 37 \\
R = N_{\text{max}} - N_{\text{min}} \\
= 49 - 26
\]
3. Determine many classes

\[ K = 1 + 3.3 \log n \]
\[ = 1 + 3.3 \log 27 \]
\[ = 1 + 3.3 (1.43) \]
\[ = 1 + 4.71 \]
\[ = 5.71 \text{ rounded 6} \]

4. Determining the length of the class

\[ P = \frac{R}{K} = \frac{23}{6} = 3.83 \text{ rounded 4} \]

5. Table of frequency distribution

From the result of data questionnaire, the researcher determine class interval from 26 until 49 to determine frequency distribution, frequency distribution can be seen in table 4.2.

<table>
<thead>
<tr>
<th>Interval</th>
<th>Fi</th>
<th>xi</th>
<th>Fi.xi</th>
<th>Fx</th>
<th>Fr%</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-29</td>
<td>2</td>
<td>27.5</td>
<td>55</td>
<td>2</td>
<td>7.41</td>
</tr>
<tr>
<td>30-33</td>
<td>3</td>
<td>31.5</td>
<td>94.5</td>
<td>5</td>
<td>11.11</td>
</tr>
<tr>
<td>34-37</td>
<td>6</td>
<td>35.5</td>
<td>213</td>
<td>11</td>
<td>22.22</td>
</tr>
<tr>
<td>38-41</td>
<td>3</td>
<td>39.5</td>
<td>118.5</td>
<td>14</td>
<td>11.11</td>
</tr>
<tr>
<td>42-45</td>
<td>9</td>
<td>43.5</td>
<td>391.5</td>
<td>23</td>
<td>33.33</td>
</tr>
</tbody>
</table>
6. Graphs histogram and polygon

From table frequency distribution, the researcher get the data frequency variable X, the result of frequency can be seen in graph as follow:

<table>
<thead>
<tr>
<th>46-49</th>
<th>4</th>
<th>47.5</th>
<th>190</th>
<th>27</th>
<th>14.81</th>
</tr>
</thead>
<tbody>
<tr>
<td>∑</td>
<td>27</td>
<td>225</td>
<td>1062.5</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

7. Analysis of central tendency (The size of the central symptoms) in way:

a. Calculating the mean of the formula

\[ X = \frac{1062.5}{27} \]

\[ = 39.4 \]
Tabel 4.3
Interpretation Value of Mean English Teacher
Interpersonal Behaviour (Variable X)

<table>
<thead>
<tr>
<th>Magnitude Value of Mean</th>
<th>Interpretation Value of Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>76 – 100</td>
<td>Very Good</td>
</tr>
<tr>
<td>51 – 75</td>
<td>Good</td>
</tr>
<tr>
<td>26 – 50</td>
<td>Enough</td>
</tr>
<tr>
<td>1 – 25</td>
<td>Low</td>
</tr>
</tbody>
</table>

Based on mean in above, result the number is 39,4 and after interpretation with interpretation table, number of (39,4) there is between (26-50), the interpretation is enough. so can conclusion that Teacher interpersonal behavior in school of SMK Al-Mubarok Kota Serang in second grade is there level enough.

b. Calculating the median

\[ M_c = b + P \left( \frac{1}{2} \frac{n-F}{f} \right) \]

\[ = 37,5 + 4 \left( \frac{13,5-11}{3} \right) \]

\[ = 37,5 + 4 (0,83) \]

\[ = 37,5 + 3,32 \]

\[ = 40,82 \]

c. Calculating Modus

\[ M_o = b + P \left( \frac{b_1}{b_1+b_2} \right) \]

\[ = 41,5 + 4 \left( \frac{6}{6+5} \right) \]
\[ = 41.5 + 4 \times 0.55 \]
\[ = 41.5 + 2 \]
\[ = 41.7 \]

d. Determine the standard deviation

\[
SD = \sqrt{\frac{\sum f_i (x_i - \bar{x})^2}{N-1}}
\]

To determine standard of deviation of Variable X, researcher need to search \( F(x_i - x)^2 \) or Number of the multiplication of frequency of each score with a score that has been squared deviation. The result of Number of the multiplication of frequency of each score with a score that has been squared deviation can be seen in table 4.4.

**Table 4.4**

**Measurement of Standard Deviation Variable English Teacher Interpersonal Behaviour (Variable X)**

<table>
<thead>
<tr>
<th>Interval</th>
<th>F</th>
<th>(x_i - \bar{x})</th>
<th>(x_i - \bar{x})^2</th>
<th>F(x_i - \bar{x})^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-29</td>
<td>2</td>
<td>-11.9</td>
<td>141.61</td>
<td>283.22</td>
</tr>
<tr>
<td>30-33</td>
<td>3</td>
<td>-7.9</td>
<td>62.41</td>
<td>187.23</td>
</tr>
<tr>
<td>34-37</td>
<td>6</td>
<td>-3.9</td>
<td>15.21</td>
<td>91.26</td>
</tr>
<tr>
<td>38-41</td>
<td>3</td>
<td>0.1</td>
<td>0.01</td>
<td>0.03</td>
</tr>
<tr>
<td>42-45</td>
<td>9</td>
<td>4.1</td>
<td>16.81</td>
<td>151.29</td>
</tr>
<tr>
<td>46-49</td>
<td>4</td>
<td>8.1</td>
<td>65.61</td>
<td>262.44</td>
</tr>
<tr>
<td>( \sum )</td>
<td>27</td>
<td>-11.4</td>
<td>301.66</td>
<td>975.47</td>
</tr>
</tbody>
</table>

From table 4.4, researcher can determine the standard deviation, as follow:

\[
SD = \sqrt{\frac{\sum f_i (x_i - \bar{x})^2}{N-1}}
\]
After determine the standard of deviation, researcher calculates a test of normality.

e. A test of Normality

\[ Z = \frac{x_i - x}{SD} \]

\[ Z_1 = \frac{25.5 - 39.4}{6.12} = \frac{-12.9}{6.12} = -2.11 \]

\[ Z_2 = \frac{29.5 - 39.4}{6.12} = \frac{-8.9}{6.12} = -1.45 \]

\[ Z_3 = \frac{33.5 - 39.4}{6.12} = \frac{-4.9}{6.12} = -0.80 \]

\[ Z_4 = \frac{37.5 - 39.4}{6.12} = \frac{-0.9}{6.12} = -0.15 \]

\[ Z_5 = \frac{41.5 - 39.4}{6.12} = \frac{3.1}{6.12} = 0.51 \]

\[ Z_6 = \frac{45.5 - 39.4}{6.12} = \frac{7.1}{6.12} = 1.16 \]

\[ Z_7 = \frac{48.5 - 39.4}{6.12} = \frac{10.1}{6.12} = 1.65 \]

\[ Z_{Arithmetic} = -1.19 \]

\[ Z_{table} = 0.3830 \]

From calculate above, researcher find normality from Z hitung is -1.19 and Z table 0.3830. Z table can be seen in Table distribution normality.

f. Search Value \( X^2 \) (Chi quadrate) with the formula:

\[ X^2 = \sum \frac{(O_i - E_i)^2}{E_i} \]
After a test of normality, researcher search value of $X^2$ (Chi quadrate), to search value of $X^2$ (Chi quadrate) the first, researcher need determine $O_i$ (Number of frequency of observation, that is in many data which into interval class) and $E_i$ (frequency of expectation= $n \times$ wide $Ztable$) to determine $\sum \frac{(O_i - E_i)^2}{E_i}$.

The result of $\sum \frac{(O_i - E_i)^2}{E_i}$ can be seen in table 4.5.

**Table 4.5**

**Distribution Frequency Observation and Expectation English Teacher Interpersonal Behaviour (Variable X)**

<table>
<thead>
<tr>
<th>Batas Kelas Klas</th>
<th>Z hitung</th>
<th>Z tabel</th>
<th>LZ Tabel</th>
<th>Ei</th>
<th>Oi</th>
<th>Oi-Ei</th>
<th>(Oi-Ei)$^2$</th>
<th>(Oi-Ei)$^2$/Ei</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.5</td>
<td>-2.11</td>
<td>0.4821</td>
<td>0.0556</td>
<td>1.501</td>
<td>2</td>
<td>0.4988</td>
<td>0.248801</td>
<td>0.165735039</td>
</tr>
<tr>
<td>29.5</td>
<td>-1.45</td>
<td>0.4265</td>
<td>0.1384</td>
<td>3.737</td>
<td>3</td>
<td>-0.737</td>
<td>0.542874</td>
<td>0.145277842</td>
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<tr>
<td>33.5</td>
<td>-0.8</td>
<td>0.2881</td>
<td>-0.0868</td>
<td>-2.344</td>
<td>6</td>
<td>8.3436</td>
<td>69.61566</td>
<td>-29.7045831</td>
</tr>
<tr>
<td>37.5</td>
<td>-0.15</td>
<td>0.3749</td>
<td>0.1799</td>
<td>4.857</td>
<td>3</td>
<td>-1.857</td>
<td>3.449563</td>
<td>0.71018123</td>
</tr>
<tr>
<td>41.5</td>
<td>0.51</td>
<td>0.195</td>
<td>-0.182</td>
<td>-4.914</td>
<td>9</td>
<td>13.914</td>
<td>193.5994</td>
<td>-39.39751648</td>
</tr>
<tr>
<td>45.5</td>
<td>1.16</td>
<td>0.377</td>
<td>-0.0735</td>
<td>-1.985</td>
<td>4</td>
<td>5.9845</td>
<td>35.81424</td>
<td>-18.04698425</td>
</tr>
<tr>
<td>48.5</td>
<td>1.65</td>
<td>0.4505</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>$\sum$</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-86.12788973</td>
</tr>
</tbody>
</table>

From calculating above, researcher get $X^2$ (Chi quadrate) of variable $X$ that is: $x^2 = \sum \frac{(O_i - E_i)^2}{E_i} = -86.13$

g. Determine The Degrees of Freedom

$$dk = K - 3$$

$$= 6 - 3$$

$$= 3$$
h. Determine $X^2$ table with standard significant ($\alpha$) 5%  

$X^2$ table = $(1 - x) \times (dk)$  

$= (1 - 0.05) \times (3)$  

$= 2,85$  

$= 7,81$  

Based on calculating above, known $X^2$ arithmetic = -74,99 and $X^2$ table = 4,3. So, $X^2$ arithmetic < $X^2$ table thus can conclusion that data originate from population which distribution normal.

**B. Analysis of Students Learning Motivation**

1. Use the result of data questionnaire  

To determine students learning motivation (Variable Y) in SMK Al-Mubarok Kota Serang researcher gives questionnaire (the amount questions of questionnaire are 10 item questions) to students in second grade which the amount of 27 people and the result of questionnaire from students answer can be seen in Table 4.6.

**Table 4.6**

<table>
<thead>
<tr>
<th>No</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
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<td>4</td>
<td>36</td>
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<td>3</td>
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<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>30</td>
</tr>
</tbody>
</table>

Recapitulation result of questionnaire Variable Score

Data Student Motivation (Variable Y)
The result of data questionnaire Students’ learning motivation (Variable Y) with the total respondents are 27 students, based on the lowest value and the highest value, as follows:

26 29 30 31 33 33 34 35 36
36 37 38 38 39 40 40 40 40
41 42 43 43 44 45 46 46 49
2. Use the pattern of range

\[ N = 27 \]
\[ R = X_{\text{max}} - X_{\text{min}} \]
\[ = 49 - 26 \]
\[ = 23 \]

3. Determine many classes

\[ K = 1 + 3,3 \log n \]
\[ = 1 + 3,3 \log 27 \]
\[ = 1 + 3,3 \times 1,43 \]
\[ = 1 + 4,71 \]
\[ = 5,71 \text{ rounded 6} \]

4. Determining the length of the class

\[ P = \frac{R}{K} \]
\[ = \frac{23}{6} \]
\[ = 3,83 \text{ rounded 4} \]

5. Tabel of Frequency Distribution

From the result of data questionnaire of variable Y, the researcher determine class interval from 26 until 49 to determine frequency distribution, frequency distribution can be seen in table 4.7.
**Tabel 4.7**

**Table of Frequency Distribution (Variable Y)**

<table>
<thead>
<tr>
<th>Interval</th>
<th>Fi</th>
<th>xi</th>
<th>fi.xi</th>
<th>fx</th>
<th>fr%</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 - 29</td>
<td>2</td>
<td>27.5</td>
<td>55</td>
<td>2</td>
<td>7.41</td>
</tr>
<tr>
<td>30 - 33</td>
<td>4</td>
<td>31.5</td>
<td>126</td>
<td>6</td>
<td>14.81</td>
</tr>
<tr>
<td>34 - 37</td>
<td>5</td>
<td>35.5</td>
<td>177.5</td>
<td>11</td>
<td>18.52</td>
</tr>
<tr>
<td>38 - 41</td>
<td>8</td>
<td>39.5</td>
<td>316</td>
<td>19</td>
<td>29.63</td>
</tr>
<tr>
<td>42 - 45</td>
<td>5</td>
<td>43.5</td>
<td>217.5</td>
<td>24</td>
<td>18.52</td>
</tr>
<tr>
<td>46 - 49</td>
<td>3</td>
<td>47.5</td>
<td>142.5</td>
<td>27</td>
<td>11.11</td>
</tr>
<tr>
<td><strong>∑</strong></td>
<td>27</td>
<td>225</td>
<td>1034.5</td>
<td></td>
<td>100.00</td>
</tr>
</tbody>
</table>

6. **Graph histogram and Polygon**

From table frequency distribution, the researcher get the data frequency variable Y, the result of frequency can be seen in graph as follow:

![Graph of Students' Learning Motivation (Variable Y)]
7. Analysis of central tendency (The size of the central symptoms) in a way:

a. Calculating the mean of the formula

\[ X = \frac{1034.5}{27} \]

\[ = 38.3 \]

**Table 4.8**

**Interpretation Value of Mean Student Learning Motivation**

(Variable Y)

<table>
<thead>
<tr>
<th>Magnitude Value of Mean</th>
<th>Interpretation Value of Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>76 – 100</td>
<td>Very Good</td>
</tr>
<tr>
<td>51 – 75</td>
<td>Good</td>
</tr>
<tr>
<td>26 – 50</td>
<td>Enough</td>
</tr>
<tr>
<td>1 – 25</td>
<td>Low</td>
</tr>
</tbody>
</table>

Based on mean in above, result the number is 38.3 and after interpretation with interpretation table, number of (38.3) there is between (26-50), the interpretation is enough. so can conclusion that Teacher interpersonal behavior in school of SMK Al-Mubarok Kota Serang in second grade is there level enough.

b. Calculating the median

\[ M_c = b + P \left( \frac{\frac{1}{2}n - F}{f} \right) \]
= 37,5 + 4 \left(\frac{13,5-11}{58}\right)
= 37,5 + 4 \times 1,3
= 37,5 + 1,2
= 38,7

c. Calculating Modus

\[
M_o = b + P \left(\frac{b_1}{b_1+b_2}\right)
\]
= 47,5 + 4 \left(\frac{5}{5+3}\right)
= 47,5 + 4 \times 0,625
= 47,5 + 2,5
= 50

d. Determine the standard deviation

\[
SD = \sqrt{\frac{\sum_{i=1}^{N} f_i (x_i - x)^2}{N-1}}
\]

To determine standard of deviation Variable Y, researcher need to search \( F (x_i - x)^2 \) or Number of the multiplication of frequency of each score with a score that has been squared deviation. The result of Number of the multiplication of frequency of each score with a score that has been squared deviation can be seen in table 4.9.

**Table 4.9**

**Measurement of Standard Deviation Variable**

**Student Learning Motivation**

(Variable Y)

<table>
<thead>
<tr>
<th>Interval</th>
<th>F</th>
<th>(xi - x)</th>
<th>(xi - x)^2</th>
<th>F(xi - x)^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 - 29</td>
<td>2</td>
<td>-10.8</td>
<td>116.64</td>
<td>233.28</td>
</tr>
<tr>
<td>30 - 33</td>
<td>4</td>
<td>-6.8</td>
<td>46.24</td>
<td>184.96</td>
</tr>
</tbody>
</table>
From table 4.4, researcher can determine the standard deviation, as follow:

\[
SD = \sqrt{\frac{\sum fi(x_i - \bar{x})^2}{N-1}}
\]

\[
SD = \sqrt{\frac{858.08}{27-1}}
\]

\[
SD = \sqrt{\frac{858.08}{26}}
\]

\[
SD = \sqrt{33.0} = 5.74
\]

After determine the standard of deviation, researcher calculates a test of normality.

e. A test of Normality

\[
Z = \frac{x_i - \bar{x}}{SD}
\]

\[
Z_1 = \frac{25.5 - 38.3}{5.74} = \frac{-12.8}{5.74} = -2.23
\]

\[
Z_2 = \frac{29.5 - 38.3}{5.74} = \frac{-8.8}{5.74} = -1.53
\]

\[
Z_3 = \frac{33.5 - 38.3}{5.74} = \frac{-4.8}{5.74} = -0.84
\]

\[
Z_4 = \frac{37.5 - 38.3}{5.74} = \frac{-0.8}{5.74} = -0.14
\]

\[
Z_5 = \frac{41.5 - 38.3}{5.74} = \frac{3.2}{5.74} = 0.56
\]

\[
Z_6 = \frac{45.5 - 38.3}{5.74} = \frac{7.2}{5.74} = 1.25
\]
\[
Z_l = \frac{48.5 - 38.3}{5.74} = \frac{10.2}{5.74} = 1.78
\]

\[
Z_{\text{Arithmetic}} = -1.15
\]

\[
Z_{\text{table}} = 0.3749
\]

From calculate above, researcher find normality from Z arithmetic is -1.15 and Z table 0.3749. Z table can be seen in Table distribution normality.

f. Search Value \(X^2\) (Chi Kuadrat) with the formula:

\[
X^2 = \sum \frac{(O_i - E_i)^2}{E_i}
\]

After a test of normality, researcher search value of \(X^2\) (Chi quadrat), to search value of \(X^2\) (Chi quadrat) the first, researcher need determine \(O_i\) (Number of frequency of observation, that is in many data which into interval class) and \(E_i\) (frequency of expectation= n x wide Ztable) to determine \(\sum \frac{(O_i - E_i)^2}{E_i}\).

The result of \(\sum \frac{(O_i - E_i)^2}{E_i}\) can be seen in table 4.10.

**Tabel 4.10**

**Distribution Frequency Observation and Expectation**

**English Students’ Learning Motivation (Variable Y)**

<table>
<thead>
<tr>
<th>Batas Kelas</th>
<th>Z hitung</th>
<th>Z table</th>
<th>LZ Tabel</th>
<th>Ei</th>
<th>Oi</th>
<th>Oi-Ei</th>
<th>(Oi-Ei)²</th>
<th>(Oi-Ei)²/Ei</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.5</td>
<td>-2.23</td>
<td>0.4871</td>
<td>0.0501</td>
<td>1.3527</td>
<td>2</td>
<td>0.6473</td>
<td>0.419</td>
<td>0.30974887</td>
</tr>
<tr>
<td>29.5</td>
<td>-1.53</td>
<td>0.437</td>
<td>-0.0301</td>
<td>-0.8127</td>
<td>4</td>
<td>4.8127</td>
<td>23.1621</td>
<td>-28.5001615</td>
</tr>
<tr>
<td>33.5</td>
<td>-0.84</td>
<td>0.4671</td>
<td>0.4114</td>
<td>11.1078</td>
<td>5</td>
<td>-6.1078</td>
<td>37.3052</td>
<td>3.3584707</td>
</tr>
<tr>
<td>37.5</td>
<td>-0.14</td>
<td>0.0557</td>
<td>-0.1566</td>
<td>-4.2282</td>
<td>8</td>
<td>12.2282</td>
<td>149.529</td>
<td>-35.3646647</td>
</tr>
<tr>
<td>41.5</td>
<td>0.56</td>
<td>0.2123</td>
<td>-0.1821</td>
<td>-4.9167</td>
<td>5</td>
<td>9.9167</td>
<td>98.3409</td>
<td>-20.0014113</td>
</tr>
<tr>
<td>45.5</td>
<td>1.25</td>
<td>0.3944</td>
<td>-0.0681</td>
<td>-1.8387</td>
<td>3</td>
<td>4.8387</td>
<td>23.413</td>
<td>-12.7334626</td>
</tr>
</tbody>
</table>
From calculating above, researcher get $X^2$ (Chi square) of variable $Y$ that is:

$$X^2_{\text{arithmetic}} = \sum \frac{(O_i - E_i)^2}{E_i} = -92.93$$

**g. Determine The Degrees of Freedom**

$$dk = K - 3$$

$$= 6 - 3$$

$$= 3$$

**h. Determine $X^2$ table with standard significant**

$$X^2_{\text{table}} = (1 - x) (dk)$$

$$= (1 - 0.05) (3)$$

$$= 2.85$$

$$X^2_{\text{table}} = 7.81$$

Based on calculating above, known $X^2_{\text{arithmetic}} = -92.93$ and $X^2_{\text{table}} = 7.81$. So, $X^2_{\text{arithmetic}} < X^2_{\text{table}}$ thus it can conclusion that originate from population which distribution normal.

**C. Analysis of The Correlation Between Students’ Perceptions on English Teacher Interpersonal Behaviour and Their Learning Motivation**

Based on the answer data questionnaire from students, the next researcher will analysis data with use analysis technique of
But, before researcher is calculating for get the number of correlation index \( r_{xy} \) first formula hypotheses alternative (Ha) and Hypotheses nol (Ho), as follows:

1. Ho explain there is no correlation between student’s perceptions Teacher interpersonal behaviour and student motivation in SMK Al-Mubarok Kota Serang.

2. Ha explain there is correlation between student’s perceptions Teacher interpersonal behaviour and student motivation in SMK Al-Mubarok Kota Serang.

Next, researcher is calculating from data which is get to get the number of index correlation \( r_{xy} \). There are steps to search correlation between Variable X and Variable Y, as follows:

Table 4.11

Data of English Teacher Interpersonal Behaviour (Variable X) and Student Learning Motivation (Variable Y)

<table>
<thead>
<tr>
<th>No</th>
<th>X</th>
<th>Y</th>
<th>X²</th>
<th>Y²</th>
<th>XY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>42</td>
<td>36</td>
<td>1764</td>
<td>1296</td>
<td>1512</td>
</tr>
<tr>
<td>2</td>
<td>27</td>
<td>35</td>
<td>729</td>
<td>1225</td>
<td>945</td>
</tr>
<tr>
<td>3</td>
<td>45</td>
<td>46</td>
<td>2025</td>
<td>2116</td>
<td>2070</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
<td>40</td>
<td>1600</td>
<td>1600</td>
<td>1600</td>
</tr>
<tr>
<td>5</td>
<td>37</td>
<td>36</td>
<td>1369</td>
<td>1296</td>
<td>1332</td>
</tr>
<tr>
<td>6</td>
<td>35</td>
<td>30</td>
<td>1225</td>
<td>900</td>
<td>1050</td>
</tr>
<tr>
<td>7</td>
<td>42</td>
<td>49</td>
<td>1764</td>
<td>2401</td>
<td>2058</td>
</tr>
<tr>
<td>8</td>
<td>36</td>
<td>29</td>
<td>1296</td>
<td>841</td>
<td>1044</td>
</tr>
<tr>
<td>9</td>
<td>37</td>
<td>38</td>
<td>1369</td>
<td>1444</td>
<td>1406</td>
</tr>
<tr>
<td>10</td>
<td>44</td>
<td>37</td>
<td>1936</td>
<td>1369</td>
<td>1628</td>
</tr>
<tr>
<td>11</td>
<td>47</td>
<td>43</td>
<td>2209</td>
<td>1849</td>
<td>2021</td>
</tr>
</tbody>
</table>
1. Correlation Analysis (Product Moment)

a) regression analysis

\[ \bar{Y} = a + b \times x \]

\[ a = \frac{(\Sigma x^2)(\Sigma y) - (\Sigma y)(\Sigma xy)}{N (\Sigma x^2) - (\Sigma x)^2} \]

\[ = \frac{(43425)(1034) - (1034)(41354)}{27 (43425) - (1071)^2} \]

\[ = \frac{(43425)(1034) - (1034)(41354)}{1172475 - 1147041} \]

\[ = \frac{44901450 - 42760036}{25434} \]

\[ = \frac{2141414}{25434} \]
\[ b = \frac{N \sum xy - (\sum x)(\sum y)}{N (\sum x^2) - (\sum x)^2} \]
\[ = \frac{27.41354 - (1071)(1034)}{27 (43425) - (1071)^2} \]
\[ = \frac{1116558 - 1107414}{1172475 - 1147041} \]
\[ = \frac{9144}{25434} \]
\[ = 0,36 \]

\[ \hat{Y} = a + b \times \]
\[ = 84,2 + 0,36 \]

So, similarity regression is 84,2 + 0,36x, the meaning is every consist change units from variable X, then will consist change in the amount of 0,36 from variable Y from constants 84,2.

b) Correlation coefficient analysis

\[ r_{xy} = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{(N \sum x^2 - (\sum x)^2)(N \sum y^2 - (\sum y)^2)}} \]
\[ = \frac{27.41354 - (1071)(1034)}{\sqrt{(27.43425 - (1071)^2)(27.40444 - (1034)^2)}} \]
\[ = \frac{1116558 - 1107414}{\sqrt{(1172475 - 1147041)(1091988 - 1069156)}} \]
\[ = \frac{9144}{\sqrt{580709088}} \]
\[ = \frac{9144}{\sqrt{24097,9}} \]
\[ = 0,37 \]

\[ r_{xy} = 0,37 \]
\[ r_{table} = 0,381 \]
2. Result of the research Interpretation data

For interpretation value coefficient correlation, so researcher use interpretation “r” product moment as follows:

**Table 4.12**

**Interpretation “r” Product Moment**

<table>
<thead>
<tr>
<th>Large “r”</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,00 - 0,20</td>
<td>Between variable X and Variable Y there is correlation, but it correlation very low so it correlation is ignore (there is no correlation)</td>
</tr>
<tr>
<td>0,20 – 0,40</td>
<td>Between variable X and variable Y there is correlation which low</td>
</tr>
<tr>
<td>0,40 – 0,60</td>
<td>Between variable X and variable Y there is correlation which enough</td>
</tr>
<tr>
<td>0,60 – 0,80</td>
<td>Between variable X and variable Y there is correlation which strength and high</td>
</tr>
<tr>
<td>0,80 – 1,00</td>
<td>Between variable X and variable Y there is correlation which very high</td>
</tr>
</tbody>
</table>

From calculation above, known that index coefficient correlation in the amount of 0,37 and after construction with interpretation table number “r” (0,37) there is between (0,20-0,40) which the interpretation is between variable X and variable Y there is correlation which low.
Next, necessary to experiment significant correlation, to determine experiment of significant correlation, researcher determine steps as follows:

a. Determine significant of correlation, with pattern

\[ t = \frac{r \sqrt{N-2}}{\sqrt{1-r^2}} \]

\[ = \frac{0.37 \sqrt{27-2}}{\sqrt{1-0.37^2}} \]

\[ = \frac{0.37 \sqrt{25}}{\sqrt{1-0.1369}} \]

\[ = \frac{0.375}{\sqrt{0.8631}} \]

\[ = \frac{0.375}{0.93} \]

\[ = 1,85 \]

\[ = 1,99 \]

\[ t_{\text{arithmetic}} = 1,99 \]

b. Determine the degrees of freedom

\[ dk = N - 2 \]

\[ = 27 - 2 \]

\[ = 25 \]

c. Determine distribution with significant 5% and dk 25

\[ t_{\text{table}} = (1 - a) \times (dk) \]

\[ = (1 - 0.05) \times (25) \]

\[ = (0.95) \times (25) \]

\[ = 23.75 \]

\[ t_{\text{table}} = 1.71 \]
Based on calculation above, known $t_{\text{arithmetic}} = 1.99$ dan $t_{\text{table}} = 1.71$, where $t_{\text{arithmetic}} (1.99) > t_{\text{table}} (1.71)$, thus hypotheses alternative (Ha) accept, while hypotheses null (H$_0$) ignore. The conclusion is there is correlation positive which significant between English teacher interpersonal behaviour (Variable X) and Student learning motivation (Variable Y).

d. Determine contribution of variable X to variable Y with the pattern:

$C_d = r^2 \times 100$

$= 0.37^2 \times 100$

$= 0.1369 \times 100$

$= 13.69\%$

Based on the result calculation above, known that the correlation English teacher interpersonal behaviour (Variable X) and Student learning motivation (Variable Y) is in the amount of 13.69% while the balance 86.31% related by other factor and can research further.
CHAPTER V
CONCLUSION AND SUGGESTION

A. Conclusions

Based on the result of research in SMK Al-Mubarok Kota Serang and experiment data according to statistic, researcher can answer the research questions as follow:

1. The result of English teacher interpersonal behaviour in SMK Al-Mubarok Kota Serang from the result of mean from variable X is 39.4. From the table of interpretation value of mean English teacher interpersonal behaviour (Variable X) show that the value 39.4 is the interpretation value of mean is in series of suffice. This mean that English teacher in SMK Al-Mubarok Kota Serang has run its task with good enough that is the teacher has run its task and responsibility as the teacher on students’ learning motivation in SMK Al-Mubarok Kota Serang that is stimulate the students, act the social relationship with students, manage the class, and show the good interpersonal behaviour to student.

2. The result of Students learning motivation in SMK Al-Mubarok Kota Serang from the result of mean from variable Y is 38.3. From the table of interpretation value of mean Students learning motivation (Variable Y) show that the value 38.3 is the interpretation value of mean is in series of suffice. This mean that the students’ learning motivation in SMK Al-Mubarok Kota Serang is students has learning motivation on English which good enough that is the student follow activities teaching and learning, work the task, get
good value achievement, spirit, discipline, follow good suggestion from teacher.

3. Based on the result of correlation coefficient analysis, known that index coefficient correlation in the amount of 0,37 and after construction with interpretation table number “r” (0,37) there is between (0,20-0,40) which the interpretation is between variable X and variable Y in SMK Al-Mubarok Kota Serang there is correlation which low and known that the correlation English teacher interpersonal behaviour (Variable X) and Student learning motivation (Variable Y) is in the amount of 13,69% while the balance 86,31% related by other factor and can research further.

B. Suggestions

Based on the research findings, the writer proposes some suggestions for the betterment of the English learning in SMK Al-Mubarok Kota Serang. the suggestions are described as follows:

1. To teacher
   The teacher should be more shows interpersonal behaviour to students.

2. To Student
   The student should be improve their motivation to learn English and active in class. The student works the instructions which command the teacher and ask to teacher if they do not understand about material in English in order the student can understand and happen the good relationship between students and teacher.
BIBLIOGRAPHY


