**CHAPTER II**

**REVIEW OF RELATED LITERATURE**

* 1. **Theoretical Framework**

Theoretical framework is a set of ideas, defenitions, propositions, which interact with each other systematically by establishing relationships between variables with the aim of explaining phenomena that have a broad discussion of things examined by the researcher.

* + 1. **Psycholinguistics**

Psycholinguistics is the study of two branches of psychology and linguistics combined into one. “Psycholinguistic has a huge role in the development phase of a human. It is based on the general principles of psychology as the science of human behavior as well as on the general principles of linguistics as the science of language” (Mukalel: 2003: 2). “Psycholinguistics related to three main topics: Acquisition, production, and comprehension of language” (Dardjowidjojo: 2003: 7).

The Acquisition process of language may be done in two ways, the Acquisition of the first language and the Acquisition of the second language. When the child is in the family environment or in a natural situation automatically he learns about one or more languages. “So, the Acquisition of the first language occurs as well as before the school-going age. We may call it as a mother tongue or the language of the parents. The Acquisition of the second language refers to a target language or the languages that learn in school” (Mukalel: 2003: 13).

The production of language is commonly involving some components process: conceptualizing, formulating, and articulating. Conceptualizing means a conscious planning activity in which a communication intention guides the construction of one or more messages. Formulating is generating natural language representations for messages. It involves two process; first, grammatical encoding, it maps the message into some grammatical form. Second, phonological enconding, it transforms the syntactic structure into a phonetic or articulatory plan. Articulating is executing the articulatory plan as a squence of articulatory gestures. It could be in a spoken or written language. According Abdurrahman (2003: 3) :

One of the parts of visual-auditory is phonological awareness. It is an awareness that language can be broken into words, syllables, and phonemes (sound of the letter). While perceptual visual is an ability to differ geometrics, letters or words. However, perception is a skill which is learned, so the teaching process can give direct effect in perceptual skill.

Then, it can be concluded that psycholinguistics is the study of psychology and linguistics which is interrelate between linguistics and psychology, where linguistics can be generated from one’s psychology.

* + 1. **Language Acquisition**

The term ‘language Acquisition’ in this lecture material is used to mean the same thing as the term ‘language acqusition’. These three terms seem to have long been known to be related to the discussion of how language was matered by humans from birth. Language acquisition is the process of language development that is processed in the brain of a child when he gets his first language both from the mother and the surroundings. There are two processes that occur when a child is acquiring the first language, namely the competency and the performance process. These two processes are two different processes. Competence is a language Acquisition process that goes on unconsciously. This process become a condition for the performance process which consists of two processes, namely understanding and publishing or the process of producing sentences. The process of understanding involves the ability or intelligence to observe the sentences that are heard. Whereas publishing involves the ability to issue or publish their own sentences. Both types of competition process if mastered. Children will become children’s linguistic abilities. So linguistic ability consists of the ability to understand and publish new sentences.

**2.1.2.1** **First language (L1) Acquisition**

First language acquisition is a natural process that occurs when children acquire their first language. In the process,’data’ is obtained by a child in developing the communication system is sound and symbol. Then it can be said that a child begins to experience the process of acquring his first language when first exposed to sound language, or in other words when first heard.

O’grady (2005) argues that,”children seem to be specificially designed to listen to the language. Even a child does not wait tobe born to start to language Acquisition”.

The process of teaching and learning English is second language acquisition because covering all processes learning any language after the first language, whether it is a second language, third, fourth and so on. The actual language acquisition problem has long been the subject of discussion by linguists and psychologists. The child apparently not only accepts the form of language that is required. Listen to him, but creatively extract the rules of language construction the mistakes as not ‘mistakes’, may be accepted as a significant sign of the existence of that creativity.

* + - 1. **Second language (L2) Acquisition**

Second language acqusition, after someone has mastered first language (L1) acqusition. Obtaining naturalistic type L2 takes place naturally in an informal situation, as happened in the process of acquiring L1. The type of L2 acquisition in the class takes place formality is characterized by the interaction between the teacher and the learner.

Provide a clear definition of L2 Acquisition as a process undertaken by someone whether consciously or not to obtain a language that is different from L1 or his mother tongue, and the process can take place naturally and can also be in a formal situation. Judging from the operation of the language acquisition tool (LAD), basically the L2 acquisition process has the same or similar process to the L1 acquisition of L1 and L2 is characterized by the existence of the same strategy in obtaining L1 and L2. They look for the order of words: moving from simple to complex in syntactic development: make generalizations of lexical and morphological forms: and interpret what is not known based on what is already known. In connection with the main similarities between the process of obtaining L1 and L2, it has been revealed by many studies. Other studies have found that both L1 and L2 learners make the same mistakes in the same linguistic categories.

* + - 1. **Learning to Read**

Some reading takes place special requirements. The specific requirements for being able to read are :

1. There is no severe vision and hearing loss.
2. Understanding of spoken or verbal language is sufficient.
3. Movement of the eyeball to follow the lones of writing letters (scanning letters in the correct order) is quite good.
4. There are no motor disturbances or motor coordination to speak (paralysis or oral praxis).

“Reading is a process that developed since humans were born, from not mastering and understand, there are early stages that children go through as they learn” Ibid (2012: 15). Which as follows :

1. Logographic Reading

At this stage, children begin to recognize the vocabulary limited to all words through unintentional cues such as a logos, images, colors or shapes.

1. Early Alphabetic Reading

To be able to develop in reading, children need to understand the insights of the alphabet writing that parents phonemes. At this stage, children use the alphabet to write words.

1. Mature Alphabetic Reading

At this stage, the children know the spelling association with its sound, children can also use it in simple words.

1. Orthographic Stages

Recognizing syllables and morphemes. At this stage, child use the analogy of previously known words to read words new ones.

1. Gaining Fluency

Fluency occurs when children begin to read easily in working reading material.

* + 1. **Dyslexia**

According to Interntional Dyslexia Association (2017) (formerly the Orton Dyslexia Society), the formal defenition of dyslexia :

Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These diffculties typically results from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and relate reading experience that can diminish the growth of vocabulary and background knowledge.

Dyslexia is a syndrome. It means that a cluster of related characteristics differs in degree and from one to others. The syndrom of dyslexia is now widely recognized as being a specific learning disability derived from neurology which does not mean low intelligence or poor educational potential.

Children with dyslexia usually have visual, right-brained global processing style. Dyslexic learners show difficulties when transferring information from one hemisphere to another. It may come from information damage in the corpus callosum or delay in inter-hemisphere transfer time, (Reid: 2005: 10).

Dyslexia is a form of difficulty in learning aspects of reading. At school, educators usually only realize when they find an inability balance between the results of reading skills with general potential or intelectual. Besides difficulties in learning aspects of reading, dyslexia also defined as difficulty in breaking a symbols or code, including phonological processes or pronunciation this is caused by biochemical conditions that are unstable or as a result of congenital.

Dyslexics may experience difficulty in recognizing and remembering word sounds. Letter combination such as *ph* in a phone could be difficult for some dyslexics. Semantic confusion may happen when reading aloud because they tend to read for meaning and context rather than focusing on reading accurately. When reading, they may also lose their place. Sometimes complete lines can be omitted, reversed and added.

Word confusion exists when dyslexics find similar sounds such as *there* and *their*. As well as rhyming can be a difficult task to do. They may also have difficulty pronouncing multi-syllabic words even the common ones. Spelling can be quite characteristic of dyslexia. When they have habitually misspelled a word, it could be difficult for them to unlearn the error and they might repeat the same error.

Richard (2007) explains “the specific cause of dyslexia is unknown. Approximately areas of the brain function when read”. Learning disabilities in dyslexia due to interference with the brain. Messages sent to the brain cannot be examined and analyzed, nor they can be arranged and formed properly, so the messages appear to be ambiguous and not arranged properly. Then the results released by the brain in the child will reverse the letters from messages transmitted from the brain. People affected by this disorder have good hearing and vision, but the hearing and reality of the message he receives is not as clearly heard by him.

Dyslexia student have the other difficulty to covers the memory areas like poor short and long term memory. They may have difficulty remembering and organizing their homework notebooks. The difficulty may affect the motor and movement control such as tying shoelaces, bumping into furniture, tripping and falling frequently”. It is important to recognize those difficulties to measure the severity of the difficulties because it will affect the result of the assessment and the interventions.

Neurologically, there are two hemispheres in the brain, the left hemisphere, and the right hemisphere. Each of them has different roles and the way of processing certain types of information. Usually the left hemisphere processes language and the small details of information, such as print. So, the left hemisphere is important for decoding tasks that are necessary for accurate reading.

Reid(2011: 20) said that, “on the other hand, the right hemisphere tends to process information in a holistic perspective involves processing pictures and other types of visual information. The right hemisphere also usually deals with comprehension and some aesthetic aspects such as the appreciation of art and music”.

In short, someone who suffers dyslexia has different brain working or minimal brain dysfunction. They tend to use the right hemisphere to learn and process information includes letters, images, and symbols because the corpus callosum does not work balanced.

It can be concluded that dyslexia is a variety of learning disability or specific learning disability. It is happen in the corpus callosum that does not work balanced and then affecting the brain forces right brain to be used more than left brain for recognizing and processing letters, images, symbols, and concepts.

* + 1. **The Types of Dyslexia**

Every linguist has his/her own view and opinion about types of dyslexia. There are several types of dyslexia as follows the genetic/biological level, the cognitive level and behavioral level. In this research, the discussion is focused only on three parts of dyslexia.

# The Biological Level

A range of new and intriguing findings have emerged, indicating that dyslexia is likely not to be caused by a single gene but through the interaction of multiple genes, with possibly different gene sets being involved with differentphenotypes (behavioural symptoms). It is not clear what bearing these genes have directly on behaviour or even on the development of the brain. It is, for instance, possible that one gene might lead say to birth complications, and so it would have only an indirect effect upon the child’s brain. Another gene might lead to sinus problems or ‘glue ear’ in infancy.

# 2.1.4.2 The Cognitive Level

In addition to the automatization deficit and phonological deficit account, the major newcomer to the cognitive level accounts is the ‘double deficit’ hypothesis. A particularly striking finding is our ‘square root rule’, that dyslexic people may take longer to acquire a skill in proportion to the square root of the time normally taken to acquire it. If a skill takes four practice sessions to master, it would take a dyslexic child eight sessions to reach the same standard. If it normally took 400 sessions, it would take the dyslexic child 8000 sessions. If replicable, this finding would have striking implications for dyslexia support in that it mandates progression in terms of small, easily assimilated steps. This would not only provide theoretical support for existing good practice in dyslexia support but might also distinguish dyslexia support requirements from those for other poor readers.

**2.1.4.3 Directional Dyslexia**

Directional dyslexia is distinguished by left-right confusion and a tendency to become disoriented or lost. The term is also occasionally used to mean confusion with letters such as p and b or d and b, where there is confusion over the 'direction' of the letter. Generally, problems with directions are a symptom of dyslexia more than a sub-type. Not all dyslexics have this problem.

These include sensory deficit (flicker, motion sensitivity, rapid auditory discrimination), motor (bead threading, balance), and cognitive (phonological, working memory, speed). The challenge is no longer to find skills where the dyslexic children perform poorly, but rather those where they perform at normal or above normal levels. These typically include non-verbal reasoning, vocabulary and Introduction 13 problem solving.

**2.1.4.4 Primary Dyslexia**

Primary dyslexia is a dysfunction of, rather than damage to, the left side of the brain (cerebral cortex) and does not change with age. Individuals with this type of dyslexia are rarely able to read above a fourth-grade level and may struggle with reading, spelling, and writing as adults.

# 2.1.4.5 Phonological (auditory) Dyslexia

Phonological (auditory) dyslexia refers to the specific learning disability termed auditory processing, or the more severe condition termed Auditory Processing Disorder (OPD). This form of dyslexia involves difficulty with sounds of letters or groups of letters. When this form of dyslexia is present, the sounds are perceived as jumbled or not heard correctly.

**2.1.5 Teaching Students With Dyslexia**

In order to help dyslexia students, teachers must first be aware of the signs and symptoms that students with dyslexia display. Students who are diagnosed with dyslexia in kindergarten and first grade become better readers than those who are not diagnosed until third grade or later. This becomes a major issue when most districts do not test students until they are two or more years behind in reading. If teachers are aware of dyslexia then they can make modifications in their classrooms to meet the needs of their students .

Once teachers are aware that they have dyslexia students in their class, there are many ways that they can assure that each student has access to grade level appropriate material. Instruction for students with dyslexia needs to be clear, focused, and direct. Students need to be given time to make meaningful connections and to fully process new information. The most important tool in teaching a dyslexia students is time. Giving them the appropriate time to learn the new material, time to make meaningful connections, and time to produce high quality work. It seems like a simple accommodation, but, with all the material that needs to be covered in a day, there is a tendency to push through even if everyone is not ready.

An effective way to make these connections is through the use of multisensory learning. Dyslexia students have difficulty making connections in the brain between spoken and written word. For early elementary grades this would include the teacher said a letter or a letter digraph sound repeatedly while the student echo sound and looked at or held a model of the letter or digraph pair. Having the student draw the letter in the air or make a gesture to represent the letter sound is another method. The teacher would introduce a series of words that all contained the same sound, and the students would listen until they could make the connection between the word and the sound. Students would then move to writing the letter and repeating the letter name or the sound with the assistance of the teacher. This would continue until the students were able to retain the new information and be able to pull it back up later. For older students, the teacher can incorporate activities that require students to talk through the learning process, not read about it, but actually talk about the steps and what they observe. The use of manipulatives within a lesson is also valuable. The more areas of the brain that are utilized, the more concrete the connections will be.

Type of disorder in reading and writing is called dyslexia. There are so many sorts of dyslexia, one category of which os due to damage to the brain, after reading and writing have been acquired. With children, however, dyslexia may be observed while they are in the process of acquiring reading and writing skills. Problem of hemispheric dominance or defects in visual perception, for example may play some role in causing difficulties in reading and writing. Consider the following example : Deer as reed.

Some children may only be able to write backwards (deer as reed) or upside-down, or in reading may only be able to wrote letters (b with d, p with q, u with n, m with w) and engage in ither anomalies. To help remedy such problem as those with letters, it is best not to present the letters to the child in isolation but in a context. Then, b and d should be shown in words, e.g tub, dog.

The various difficulties in learning reading based on (Sidiarto , Lily Dj , 2007: 82), such as, the difficulty in visual perception - spatial and child’s visual memory is hard to remember the all letters, difficult to distinguish the letters that are similar (mirror image: bd , pg , pq and w), the sequence of letters disorder (ibu - ubi) or a sequence of syllables (mata - tama), visual analysis and synthesis of the skin. This disorder is rarely, only 5 % of this type of dyslexia . The children stand in the ability of auditory perception or remembering stories. There is also the linguistic dyslexia, according to (Efendi, U and Praja, 1985: 85) this learning disabilities have difficulty in recalling words - spoken words, difficulty in distinguishing letter which similar sounds, as like t-d, b-g, spelling difficulties, including word and a chaotic heard sequence (sekolah-sekolah), this percentage is sizeable 50-60 % of the types of dyslexia.

In this way, the child can see the proper orientation of the letter and the word in which it appears. Then right hemisphere is better prepared than the left to appreciate some of the pragmatics aspects of language.

Reading is very important to the people to get the information. By reading, someone can derive the meaning of what is written in the text and can show his ideas through writing activities. It is in line with Iskandarwassid (2008:245), who said that “reading is essential for the knowledge development as a percentage of the higest transfer of knowledge was done through reading”.

Reading skill can be mastered through education because reading skill is one of the essential language skills are generally obtained by studying at school starting from primary school. Learning the skills of reading is influenced by several factors, both internal factors and external factors. Some of the elementary school students have difficulties in reading.

In general, reading learning difficulties (dyslexia) caused by factors due to mental disorder. Because of mental or psychological abilities needed by children who would demonstrate the readiness of learning. The development of and individual’s mental capacity in the form of intelligence as a result of heredity and environment. Students who cannot learn properly, then these students have learning difficulties. Djamarah (2002) says that “disorders that cause someone gets learning difficulties is that it can be a psychological syndrome that may include learning disabilities.”

**2.1.6 The Relevance Between Psycholinguistics, Language and Teaching.**

Psycholinguistics is the study of language as its formal object. Psycholinguistics consists of psychology and linguistics. Psychology that discusses the way or behavior of a person in a language or language process and linguistics examines the structure of grammar. Psycholinguistics try to someone’s process in communication or how someone uses language when communicating.

Psycholinguistics includes cognitive processes that produce sentences that match the equivalent word, vocabulary and language structure and can produce sentences that can be understood by expressions and have meaning.

Psycholinguistics has arable fields of language that occur in a person’s brain, both the listener’s brain and speaker’s brain. Theoretically psycholinguistics is to find a theory that is linguistically acceptable and psychologically can explain the nature and Acquisition of the language, because language is a tool of communication with one another. Language is mastered by a child where the child gets his first language which is commonly referred to as mother tongue.

Psycholinguistics has a very important role in the Acquisition of children’s language, because by understanding psycholinguistics, the mother or teacher can understand the process that occurs in children when the children speak and listen. So, that the teacher or parent can see from the perspective of psychology as an alternative solution if the child has a problem in his abilities.

Psycholinguistics has a scope that is language Acquisition, language usage, language production, language processing, code processing, the relationship between language and human’s behavior, the relationship between language and the brain. In the process of language and linguistics there is a process and learning, then psycholinguistics with a language has a relationship, because psycholinguistics has an object that is a language. So even in the teaching process, psycolinguistics and language have a close relationship with one another.

* 1. **Conceptual Framework**

Psycholinguistics are two branches of science namely psychology and linguistics which are combined into one and has the main object, namely language. Psychology has close relationship to language which is a communication tool or a means of connecting interactions between one another.

Psycholinguistics also helps to find out how a someone’s ability in language or language Acquisition in learning. The basic ablities that we have can be seen from the perspective of psychology and linguistics. With the ability possessed whether someone is easy to understand the language or difficult to manage words and languages. The process of acquiring the language received by someone differs according to the first language he gets. In the acceptance the first language there is a process, both receiving and teaching.

Teaching is the process of conveying or sharing knowledge, morals and motivation to someone who receives it to produce a change. Teaching process is the procedure or steps, sequence to convey a material or knowlegde to someone using various methods and techniques. With the existence of the process, it can be seen how someone’s ability and know how to overcome the problem, if someone has a problem learning in him.

Speaking in other words is communicating begins by forming sentences that are grammatically appropriate in the speaker’s brain and proceed with phonology, which is then digested by the listener’s brain and arranged according to grammatically. Thus psycholinguistics and language have a relevance for human life.

Human can not be separated from listening, speaking, reading and writing. But basically there are some people who can not do that ability, like the ability in reading and writing. This condition is experienced by a child named Ihsan in the film tare zameen par. Ihsaan is a child and student who has difficulty in reading and writing, but he has an extraordinary imagination in working in the arts such as drawing. As a child, he has a strong artistic spirit. But his parents did not know that he has a deficiency in reading and writing. He has difficulty distinguishing letters from numbers. At home, his mother taught him whole heartedly, but it was difficult for him to understand the lesson. His mother thought he was a hilly child who was taught as well as the teacher who taught him, and in the end he met the teacher that as him, and find out why the child is having difficulty participating in learning. Until finally the teacher discovers what happen to the Ihsan, and it turns out he had a difficult in reading and writing disorder called dyslexia. With the illness he experienced, the teacher sought a solution to teach the Ihsan by how to make a paper painting into a book to learn and recognize the letters and numbers. Until finally Ihsan became an intelligent student and competent student who was very good.

From this situation the researcher and the teacher know the types of the students and can successfully make the students become better and can be in learning like normal people.