

CHAPTER IV

CONCLUSION AND SUGGESTION

4.1. Conclusion

The learning process is an important thing to pay attention to. People tend to focus on the results achieved but do not know how speaking is processed in the brain. This statement is the core of the discussion of the first research question related to how the process of learning to speak works in the brain. This process involves cognitive processes in learning and speaking English in autonomous learners. When learning occurs, information is received, processed, and stored in the brain. In addition, this research question contains theories from a literature review, so it can be applied and used as a reference for critiquing and comparing with research question 2, as well as to help other researchers who want to adopt related references.

Based on the findings from research question 2, it was found that in actual practice, autonomous learners can monitor their learning process. They have control over themselves in speaking and learning. Cognitively, in terms of how information is processed in the brain, they often repeat information to strengthen its activation in the memory pathway. This is in line with the theory in research question 2, where they receive information and reinforce it through repetition. Since this study aims to critique and examine the compatibility or incompatibility of theory with real-world practice, the researcher found incompatibility with the theory. The lack of elaboration and distance or retention of information repetition became the inconsistency between theory and actual practice. In fact, this elaboration is very important to help strengthen memory into long-term memory. Repetition without elaboration becomes repetition without meaning in learning. Therefore, this study strongly recommends autonomous learners who want to learn speaking in accordance with how the brain works.

There are differences in the findings of this study both theoretically and empirically. The theoretical findings in chapter 2 regarding the speaking learning process, which are based on cognitive processes, emphasize the existence of meaningful elaboration in speaking learning. Meanwhile, the empirical findings in chapter 3, autonomous learners can monitor the speaking learning process, but from a cognitive perspective, they tend to repeat information passively. This repetition is also triggered by forgetting the information obtained, rather than necessarily retaining or expanding the information obtained, especially elaboration. Elaboration is one way to retain information while expanding existing information with new information, thus facilitating the process of information recall. These research findings indicate that cognitive processes such as elaboration play a more significant role in independent speaking learning than mere mechanical repetition. Repetition without deep processing tends to be insufficient for building and maintaining strong retention. This shows that the conceptualization of cognitive strategies in the context of autonomous learning needs to consider the interaction between repetition and elaboration in the practice of autonomous speaking learning.

4.2. Suggestion and Recommendation

Based on the findings of the study, autonomous learners are advised not to rely solely on repetition in speaking learning, but must also be able to elaborate on meaning-oriented speaking learning. The results of the study show that repetition alone does not necessarily support long-term memory retention, as participants still tend to forget the material that has been repeated. This means that in future evaluations, it is not how often a material is repeated but how deeply the speaking material is learned. Therefore, independent learners must be able to apply what they have learned in real situations so that deeper cognitive processing can occur.

Further research is recommended to examine the retention distance of repetition in relation to acquired learning information in order to retain information in the long term in the context of independent learning, because based on the findings, participants often repeat the material but also easily forget it. In addition,

research is needed to explore elaboration models or strategies for independent learners to determine how elaboration skills can be developed in an autonomous learning environment. Last, for the further research related to the learning process need to be researched quantitatively so that the data obtained is more optimal using fMRI.

Autonomous learners are recommended to systematically incorporate elaborative strategies into their independent speaking practice rather than relying solely on repetition. Structured integration of new vocabulary into meaningful contexts is likely to support deeper cognitive processing and long-term retention. Educators are encouraged to provide guidance on how cognitive strategies such as elaboration can be applied in self-directed learning environments, particularly in speaking practice. Further empirical studies are recommended to examine the long-term retention effects of repetition and elaboration in autonomous learning contexts using longitudinal designs. For teachers and lecturers who are teaching English speaking students, it is important to prioritize and adapt learning to the way the brain works, so that the learning process can be more meaningful and does not cause excessive cognitive load.

