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THE INFORMAL LEARNING ATMOSPHERE EXPOSED TO AN EFL LEARNER WITH ADHD IN VOCABULARY MASTERY

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ABSTRACT

This study was aimed to identify the components of the informal learning atmosphere exposed to the EFL learner with ADHD who had a surprising capability in vocabulary mastery and to describe the ADHD learner's engagements with the informal learning atmosphere in mastering vocabulary. This study was conducted using case study approach with semi-structured interview questions and field notes as the tools of collecting data. To collect sufficient data to analyze this study, the researcher did interviews and observations. After conducting interviews and observations, the researcher found out that three major components of informal learning atmosphere had been exposed to this learner started from his early age. There were everyday family setting, autonomous learner, and visual, audio-visual and digital media taken important parts in developing his language development, especially in his vocabulary mastery. Unfortunately, other components of informal learning atmosphere which should take place in the school could not be analyzed due to the lack of English language exposures in his special needs school. Furthermore, the researcher found that the ADHD learner's engagements with an informal learning atmosphere had maximized his strengths and minimized his weaknesses of his ADHD symptoms in enhancing his language skills, especially in mastering vocabulary.

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INTRODUCTION

As ADHD learners, they get problems with focusing and maintaining attention in learning processes, get difficulties with short-term memory and recalling the vocabulary that have been taught, and have big tendencies to daydream and miss important details of the lesson. As the result, they cannot get any improvement in learning English as their foreign language. To handle the learning problems in ADHD learners, teachers and parents should evaluate the student's individual needs and strengths (Henderson, 2006). The parents of a learner who became the participant of this research have found their child's needs and strengths. Actually, this ADHD child had speech delay symptoms which made him difficult to produce words and talk until he was four years old. This condition is related to the fact released by Diagnostic and Statistical Manual of Mental Disorder (DSM-5), ADHD frequently overlaps with other learning disorders, such as speech delay and dyslexia (American Psychiatric Association [APA], 2013).

Fortunately, his parents kept giving exposure to languages through posters, animated videos and other media. Based on all of the information above, it can be identified that this learner has mastered some English vocabulary by fulfilling several criteria of knowing words proposed by Thornbury (2002). These criteria can be a proof of the ADHD learner's productive vocabulary ability. Furthermore, to ensure the ADHD learner's receptive vocabulary ability, the researcher conducted an informal test by assessing his vocabulary mastery with the modification of Peabody Picture Vocabulary Test Fifth edition (PPVT-5) proposed by Dunn (2018). The test result indicated that he was able to master various topics of vocabulary by being able to answer almost all test items correctly.

Thus, this research focused on analyzing the informal learning atmosphere exposed to the 10-year-old EFL learner with ADHD in vocabulary mastery. This research applied the case study method with observations and interviews to collect data. Interview questions and field notes were tools to get credible and real results from the case that had been analyzed. At the end, the findings of this research were analyzed and interpreted to attain research goals.

RESEARCH METHODOLOGY

Due to the phenomenon above, the researcher employed a case study research design to find out the informal learning atmosphere exposed to this EFL learner with ADHD in vocabulary mastery. In order to find out informal learning atmosphere exposed to this ADHD learner, the researcher observed and analyzed essential components in informal learning atmosphere based on the theories from Rogoff, et al. (2016) and Godwin-Jones (2019), which were Everyday Family and Community Settings, Innovative Schools, After-school programs, Institutional settings, Autonomous Learners, and Visual Media, Audio-Visual Media and Digital Media.

In brief, the researcher identified the components in his informal learning atmosphere and described his engagement with the informal learning atmosphere in enhancing his vocabulary mastery. In order to collect the data, the researcher conducted interviews, observations, and collected artifacts in terms of audio, visual, and audio-visual materials. This research followed the guideline of semi-structured interview proposed by Merriam and Tisdell (2016), as follows: interview guide includes a mix of more and less structured interview questions; all questions used flexibly; usually specific data required from all respondents; largest part of interview guided by list of questions or issues to be explored; no predetermined wording or order.

Moreover, field notes and interview questions were used as the tools of data collection in this study. After collecting all data needed for this study, the researcher started to identify each component of the informal learning atmosphere in helping this ADHD learner to comprehend English vocabulary and the ADHD learner's engagement with the informal learning atmosphere in mastering vocabulary. In the end, the research drew the result and conclusion of this study.

RESULT AND DISCUSSION

After collecting various data from transcriptions of semi-structured interviews, field notes, and audio-visual materials, the researcher found that there were three major components of informal learning atmosphere exposed to the ADHD learner. which were everyday family settings; the learner's initiative as an autonomous learner; and visual media, audio-visual media and digital media.

The informal learning atmosphere unintentionally created by his parents helped him to foster his language development, especially in vocabulary mastery. At first, his parents only aimed to control his attention deficit and hyperactivity symptoms by creating a conducive atmosphere to make his son stay calm and quiet for a few minutes during his toddler. Therefore, his parents set all the walls in his room with colored-educative posters in English and Indonesian languages (*See Figure 1*). Moreover, his parents also provided animated videos or movies in English to make him stay quite during meal times.



Figure 1. The Learner's Room

In terms of communication, his parents had communicated in Indonesian and English languages with his son. Not only his parents, but his aunt also played and communicated with him in English, even drew paintings and made fun videos together. Moreover, his mom also helped him work on his English assignments from school. Thus, these data showed his family members had been created to support an informal learning atmosphere to help him in mastering vocabulary.

The learner had a high imagination by creating his own town, which was called "MBX City: State of California". The learner also had a high imagination by creating his own town, which was called "MBX City: State of California" (*See Figure 4*). As an ADHD learner, the learner had shown his strength by paying attention to details of his toys. Thus, the researcher identified that the learner's initiatives and interests were important parts in his language development. His imagination, motivation, intuition, initiative, and self-awareness became the keys which shaped him as an autonomous learner.



Figure 2. The learner's town 'MBX City: State of California'

The learner had been exposed to many kinds of media including visual media, audio-visual media and digital media since he was a toddler. Posters, flyers, flash cards, and toys were the visual media simultaneously exposed to the learner. The learner had been exposed to many kinds of media including visual media, audio-visual media and digital media since he was a toddler. Posters, flyers, flash cards, and toys were the visual media simultaneously exposed to the learner. He picked up many new words from the English movies or videos that he watched. For digital media, the learner used YouTube, Google Voice, and Google Search. Those apps helped him to improve his vocabulary mastery.

Further explorations from the observations and interviews had revealed the engagement of the informal learning atmosphere with the ADHD learner in enhancing his vocabulary capability. After analyzing each component of the informal learning atmosphere, the researcher classified

the ADHD learner's engagement with the informal learning atmosphere based on the types of activities in the chronological order.

Based on the interviews, his parent stated that he had been engaged with visual media since he was one year old. The parents exposed him to colored posters to handle his attention deficit and hyperactivity disorder. From the learner's engagement with posters, the learner had mastered various vocabularies related to fruits, animals, occupations, vehicles, parts of body, food, hospital, family and many others.

In addition, the parents also provided various kinds of toys since he was a baby, starting from the small to big sizes. As an ADHD learner, the learner had strong imaginations and gave high attention to details for something he liked. The learner unintentionally used his strengths to develop his English competence, especially in mastering vocabulary. By using his imagination, he created his own town. From that town, he learned various vocabularies related to building and places, signs and directions, and vehicles.

Furthermore, the words on the labels of his toys helped him to gain new vocabularies because he always read the labels on his toys. Then, he started to use the words from the labels while playing with his toys. Thus, he could differentiate and master vocabulary related to many types of transportation.

His parents have let him watch animated movies since he was one or two years old. His mother provided various animated videos on her laptop to let her son watch those animated movies. When he was 3 years old, he was able to click and choose animated videos by himself. These animated videos had successfully made him focus and stay calm for a moment. Not only to handle his ADHD symptoms, but those animated videos also became a tool to improve his language development.

For daily communications, his parents and his aunt sometimes spoke in English with him. This activity helped him to practice his vocabulary use in terms of daily basic conversations. In addition, if the learner made some mistakes while communicating with his parents and aunt, they directly corrected his mistakes and said the correct sentences to make him recognize his mistakes. Thus, the learner had an outstanding capability in productive vocabulary skill through practicing his speaking skill with his parents and his aunt.

Furthermore, digital media also gave massive access to the learner in exploring interesting videos through YouTube, playing games on his tablet computer, using Google Voice to search for something he wanted to know, and exploring new words from pictures that he searched on Google. As an ADHD learner who could not only stay in one specific topic, while watching videos, he kept moving from one video to another and watched many videos from various different topics which came into his mind. The researcher observed that for thirty minutes, he could open many videos from YouTube. It could be seen from the history of his YouTube. In addition, while using Google Voice, it became a way to test his pronunciation using English vocabulary. During the observation, the researcher found that the learner was always able to mention words with correct pronunciations to be recognized by Google Voice.

Based on the result of the observations and interview, the learner spent his time after going back from school to engage with his gadget. He usually played with his gadget from 1 p.m. to 8 or 9 p.m. In addition, during this pandemic situation, he played with his gadget almost all day. Thus, it can be concluded that the learner's engagement with YouTube, Google and Google Voice had given significant effects in shaping his excellent capability in vocabulary mastery.

With his imagination, he loved to do role play based on something he watched or explored. Before starting to do role play, the learner searched related sounds from YouTube to support his role plays to be more realistic. There was a moment when the learner searched the sounds of the operating room and electrocardiogram. Then, he played the sounds and started to act as a doctor who did surgery and started to ask for some surgical tools such as scissors, forceps, probe, scalpels, trocars, and many others.

While playing with his town, he loved to do role plays with his toy cars and pretended to be police officers, fire fighters, spies, robbers, murderers, and so on. During the role plays, he started to make conversations in English with himself, and acted out two or more roles at the same time.

Furthermore, during observations, the researcher found out that sometimes the learner requested his parent to make small flyers about announcements of missing people, animals or things (See Figure 3). Then, he acted as a sheriff or police officer and tried to find the missing animals or people. Thus, it proved how his initiative was able to create a unique atmosphere to explore and use various vocabulary during role plays which also became opportunities for him to use and improve his vocabulary mastery.



Figure 2. The Flyers of The Missing Animal & Person

With his imagination and high interests in colors, paintings became a good way to enhance his creativity. At the same time, his aunt used paintings to develop his language development. While painting together with his nephew, his aunt started to communicate in English. Moreover, not only through painting, sometimes they made some English videos together for fun.

From the data above, it could be proven that those creative and interesting activities could trigger the learner to use the vocabulary he had mastered, especially when the activities involved multisensory tasks which were suitable for the ADHD learner.

f. The ADHD Learner's Engagement during Working on English Assignments

As an English teacher, his mother created various exercises based on the lesson from his teacher. Her mother created matching exercises, found the missing words exercises, and jumbled words exercises. In addition, her mother also asked him to memorize those words, did drilling practices to his son, and applied those vocabularies in daily activities. Thus, the learner's engagement during working on his English assignments with the help from his mother had given positive language exposures in enhancing his vocabulary capability.

The result of this study revealed that the three major components of informal learning atmosphere (Rogoff, et al., 2016, & Godwin-Jones, 2019) exposed to the ADHD learner, which were everyday family settings; visual media, audio-visual media and digital media; and the learner's initiative as an autonomous learner; had enhanced his vocabulary capability.

Everyday family settings had provided the first and essential exposure for the ADHD learner to engage with the target language through educational posters and animated movies. These findings were in line with the theory from Steinberg and Sciarini (2006) who emphasized that "young second-language learners seem to pick up other languages quickly, just by exposure and without teaching" (p. 123). Even though this learner had to deal with his ADHD and speech delays, fortunately at the age of 4 years, he was able to produce words in his native language. As he grew up, he started to imitate English words that he got from educational posters, animated movies and toys. As Eddy (2011) emphasized, foreign language learners voluntarily acquire the language they want to learn.

At the age of 6 to 8 years, the learner started to use his own gadgets to dive into YouTube and Google, exploring videos and things he liked. When he was not able to write and knew spellings of words, he used Google Voice to find videos and things he loved. Thus, he already had a good pronunciation in his early age. It showed the learner as autonomous learner in using visual, audio-visual, digital media to develop his language competence. The learner's engagement

as autonomous learner with media was related to the study examined by El-Henawy (2019) which is “As every brain is unique, students need to be provided with visual, auditory, and tangible resources to learn the way they prefer” (p. 475).

On the other hand, other components proposed by Rogoff, et al., (2016) which are innovative schools, children’s “underground” informal learning in schools, after-school programs, and institutional settings could not be analyzed because the learner did not get many exposures of English language through those components in his special needs school.

This phenomenon could happen because that special needs school only focuses on controlling their student’s symptoms to achieve their learning goals rather than to give exposure to foreign languages to their students. Moreover, the lack of facilities and inadequate English teachers are also some obstacles they face in providing an English language atmosphere. In one class, students can vary from different needs and symptoms and are divided based on their grades. It becomes another challenge for teachers in that special needs school. Thus, the informal learning atmosphere could not be exposed to the learning in enhancing his English language development.

The informal learning atmosphere exposed to the ADHD learner was set as a non-didactic process in a free and natural way of exploring new skills and knowledge which was in line with the theory of informal learning atmosphere proposed by Rogoff, Gutierrez & Frederick (2016). The researcher analyzed that the informal learning atmosphere exposed to the ADHD learner led to incidental learning, tacit learning and integrative learning which had been discussed by Merriam and Bierema (2014) cited in Boileau (2018) as the sub-types of informal learning. These research findings and discussion could answer the research questions and meet the research purposes. It can be concluded that the exposure of the informal learning atmosphere had given significant effects in the learner’s outstanding vocabulary capability.

Related to psycholinguistics theories, the ADHD learner had shown some difficulties and obstacles he faced in speech productions, especially when he had speech delay symptoms. This condition was related to the theory from Mac (2015) that emphasized the size of frontal lobes in ADHD’s brain which affects speech production is smaller than the N-ADHD. Moreover, Redmon (2016) stated that in ADHD, psycholinguistic deficits with poor test performances are due to nonlinguistic weaknesses in sustained attention, working memory, or planning and organization. This theory was related to the condition of the ADHD learner in getting English language exposures. He easily lost and got distracted in the middle of language exposure activities. He also lacked planning and organizing because he tended to follow his spontaneity and curiosity.

From the theory of learning strengths in ADHD learners, Pezzica, Vezzani, and Pinto (2018) showed that ADHD learners have metacognitive awareness almost similar to Non-ADHD learners. This theory was in line with conditions of the learner in this study. He used the background knowledge from the language exposures gotten from videos, toys, posters and synthesized them with other language inputs that he had learned by using his imagination to visualize it and make connections with his surrounding learning atmosphere. This could be seen from the way he used his vocabulary knowledge in daily activities and role play activities. He could visualize his imagination through physical movements and supported sounds that he created.

In addition, Turketi (2010) stated that the natural characteristics of ADHD learners which are being spontaneous, enthusiastic, stimulating, creative and being 'the life of the party' bring advantages to ADHD learners in learning processes. During the observations, the researcher revealed that the learner was being enthusiastic and spontaneous towards something he loved and something he wanted to know more. He was also being creative in making his own town and creating his own playground in his room. With the encouragement from his aunt, the learner also showed his creativity in giving titles for paintings and making English videos for fun. Thus, those characteristics brought advantages for him during the exposure of the informal learning atmosphere to mastering vocabulary.

On the other hand, Turteki (2010) also emphasized that even though ADHD learner's sensory receptors work constantly to receive the language inputs, there is a possibility for a chaos of too much information in their brains which affect their LAD due to their poor abilities to distinguish important information. In this case, the subject of this study experienced the same situation, especially when he watched an English animated video for the first time, he tended to pick up other sounds that caught his attention rather than the language input from that video. This phenomenon could happen because the learner was too sensitive with sounds. There were some moments when he was watching a video or doing something, then he heard the sounds of a cat and a helicopter. He paused the videos that he watched and said "Do you hear that? It sounds like a cat." and "Do you hear that? It's a helicopter." Thus, the researcher concluded that sounds could be a good tool for learning vocabulary, but it also could distract him from catching meaningful information during the learning process.

All in all, the components of informal learning atmosphere provided from everyday family settings, autonomous learner, and visual, audio-visual and digital media had positively enhanced his language development, especially in mastering vocabulary. The ADHD learner's engagements with visual, audio-visual and digital media, with creative activities, in daily communication, during role play activities and working on English assignments had helped him to maximize his strengths and minimize his weakness from his ADHD symptoms. Thus, those engagements became beneficial and useful to foster his language skills, especially in vocabulary mastery.

CONCLUSION AND SUGGESTION

It was concluded that there were three major components of the informal learning atmosphere exposed to the 10-year-old EFL learner with ADHD who had an outstanding capability in vocabulary mastery. The researcher also analyzed the ADHD learner's engagement with the informal learning atmosphere in enhancing his language development, especially in mastering vocabulary. Firstly, everyday family settings exposed the learner from his parents and aunt in providing language inputs through posters, animated videos, paintings, daily communications using English language, creative activities, and work on English assignments. This was followed by the learner's intuition, imagination, and interests towards his toys, gadgets, animated videos, and other stuff which he liked. Lastly, the exposure of visual, audio-visual and digital media affected the improvement of the learner's language development, especially in mastering vocabulary. The learner enjoyed his explorations through his toys, YouTube, gaming apps in his gadgets, Google Voice, Google Search, and other stuff to gain various language exposure to enhance his vocabulary competence.

From this study, there are several points the researcher wants to suggest. Firstly, from the perspective of parents who have ADHD children, they should understand the symptoms of their children and figure out the needs, strengths, and also interests of their children. Secondly, from the view of teachers, they should also understand the symptoms, needs, strengths, and interests of their ADHD students. So, they could provide the best learning atmosphere at school, for both formal and informal settings. For further research, the researcher suggests taking the scope of informal learning atmosphere in the school circumstances exposed to ADHD learners in learning a foreign language.

REFERENCES

American Psychiatric Association [APA]. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.). American Psychiatric Publishing.

- Boileau, T. (2018). Informal Learning. In R. West (Ed.), *Foundations of Learning and Instructional Design Technology* (1st ed.). EdTech Books.
- Carrer, L. R. J. (2015). Music and Sound in Time Processing of Children with ADHD. *Frontiers Psychiatry*, 6:127. doi: 10.3389/fpsy.2015.00127
- Dunn, D. M. (2018). *Peabody Picture Vocabulary Test, Fifth Edition (PPVT-5)*. Pearson Assessments.
- DuPaul, G. J., Gormley, M. J., & Laracy, S. D. (2013). Comorbidity of LD and ADHD: Implications of DSM-5 for Assessment and Treatment. *Journal of Learning Disabilities*, 46(1), 43–51. <https://doi.org/10.1177/0022219412464351>
- Eddy, Eva. (2011). On the Interconnections between Selected Aspects of English Grammar in Slovak Learner's acquisition. University of Prešov.
- El-Henawy, W. M. (2019). Using Brain-Based Instruction to Optimize Early Childhood English Language Education. *Early Childhood Development: 79 Concepts, Methodologies, Tools, and Applications*, (pp. 116-139). IGI Global. doi: 10.4018/978-1-5225-7507-8.ch022
- Godwin-Jones, R. (2019). Riding the Digital Wilds: Learner Autonomy and Informal Language Learning. *Language Learning & Technology*, 23(1), 8–25. <https://doi.org/10125/44667>
- Mac, D. (2015, January 16). The Connection between ADHD, Speech Delays, Motor Skill Delays, Sensory Processing Disorders and Sleep Issues. *Counseling Today: A Publication of the American Counseling Association*. <https://ct.counseling.org/2015/01/the-connection-between-adhd-speechdelays-motor-skill-delays-sensory-processing-disorders-and-sleep-issues/>
- Merriam, S. B., Tisdell, E. J. (2016). *Qualitative Research: A Guide to Design and Implementation* (4th Ed.). Jossey-Bass.
- Redmond S. M. (2016). Language Impairment in the AttentionDeficit/Hyperactivity Disorder Context. *Journal of speech, language, and hearing research: JSLHR*, 59(1), 133–142. doi: 10.1044/2015_JSLHR-L-15- 003
- Rogoff, B., Callanan, M., Gutiérrez, K. D., & Erickson, F. (2016). The Organization of Informal Learning. *Review of Research in Education*, 40(1), 356–401 <https://doi.org/10.3102/0091732X16680994>
- Steinberg, D. D., & Sciarini, N. V. (2006). *An Introduction to Psycholinguistics*. Person Education Limited.
- Thornbury, S. (2002). *How to Teach Vocabulary*. Pearson Education.
- Turketi, Natalia. (2010). *Teaching English to Children with ADHD*. MA TESOL Collection. SIT Graduate Institute.
- Pezzica, S., Vezzani, C., & Pinto, G. (2018). Metacognitive knowledge of attention in children with and without ADHD symptoms. *Research in developmental disabilities*, 83, 142-15.