Volarian Game: Engaging EFL Learners' Vocabulary Learning During the Covid-19 Outbreak

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Abstrak

Penelitian ini bertujuan untuk mengembangkan Volarian Game untuk menarik minat siswa EFL dalam belajar kosakata Bahasa Inggris selama wabah Covid-19. Penelitian ini dilakukan dengan metode Penelitian dan Pengembangan (Research and Development) dan diuji dengan PTK (Penelitian Tindakan Kelas). Kemudian, peneliti membagikan angket pra-motivasi dan pasca-motivasi untuk mengetahui ketertarikan siswa dalam belajar kosakata selama belajar di rumah sebelum dan sesudah menggunakan Volarian. Dalam angket pra motivasi skor total menunjukkan poin 1036. Angka 1036 berada dalam rentang skor sangat tidak setuju dan tidak setuju yang berarti bahwa ketertarikan siswa dalam belajar kosakata selama belajar di rumah rendah. Namun, dalam hasil angket pasca motivasi, total skor menunjukkan 1853 poin. Angka 1853 berada dalam rentang skor setuju dan sangat setuju yang berarti bahwa setelah menggunakan Volarian siswa tertarik untuk belajar kosakata Bahasa inggris selama belajar di rumah. Dengan demikian, berdasarkan rekapitulasi angket pra motivasi dan pasca motivasi menunjukkan bahwa hasil uji lapangan dengan menggunakan metode PTK (Penelitian Tindakan Kelas) membuktikan bahwa adanya peningkatan keterarikan siswa dalam belajar kosakata selama pembelajaran jarak jauh sebelum dan sesudah menggunakan Volarian.

Kata kunci*: Kosakata, Corona virus, Volarian Game.*

Abstract

This research aims at developing a Volarian game to engage EFL learners to learn vocabulary during the Covid-19 outbreak. This research was conducted with Research and Development (R&D) and tested in Class Action Research (CAR). Then, the researcher distributes pre-motivation and post-motivation questionnaires to know the students' engagement in learning vocabulary during study at home before and after using Volarian. In the pre-motivation questionnaire total score indicated a point of 1036. The number 1036 is in the strongly disagree and disagree score range which means that student engagement in learning vocabulary during study at home is low. However, in a post-motivation questionnaire result, a total score indicated a point of 1853. The number 1853 is in the agree and strongly agree score range which means that after the student using Volarian can engage them to learn vocabulary during study at home. Accordingly, based on the recapitulation of pre-motivation and post-motivation questionnaires show that the results of field-testing by using CAR (Class Action Research) method prove that there is an engagement of students in learning vocabulary during distance learning before and after using Volarian.

Keywords: Vocabulary, Corona virus, Volarian Game.

INTRODUCTION

The Education Law 20 of 2003 defines education as an effort to create an atmosphere and the learning process so the learners can improve their ability to have the spiritual strength of religion, morality, self-control, good personality, intelligence, and skills required by themselves, community, nation and for the country. Education is something that cannot be separated in human life because education plays a significant role in the country's development. If there is no education for the community then a country will be left behind by other countries because education affects all aspects including economy, culture and technology (Johan and Harlan, 2014, p. 53).

Meanwhile, a vocabulary is a crucial tool for mastering language elements because vocabulary is to understand speaking and written form (Viera, 2017, p. 90). Vocabulary defines as a starting point and the core of language complexities in learning a new language (Basuki et al., 2018, p. 17). Vocabulary will help learners master four skill languages that include listening, reading, speaking and writing (Aisyah, 2017, p. 294). Therefore, if the learner's vocabulary knowledge is weak, the ability to understand and express himself will be limited (Susanto, 2017, p. 182).

Unfortunately, coronavirus (covid-19) has quickly infected millions of people around the world (Sackey and Barfi, 2021, p. 32). Covid-19 or Coronavirus disease is a pneumonia from Wuhan China and nowadays is classify as Severe Acute Respiratory Syndrome Coronavirus 2 or SARS-CoV-2 (Singh, 2020, p. 1). Then, to prevent the spread of the coronavirus a social distancing must implement (Mukti and Basuki, 2020, p. 82). Social distancing is a reduction in the intensity of social interaction between individuals in which direct physical contact between humans is restricted (Herdina, 2020, p. 93). In response with this, the Minister of Education and Culture issued a Circular of Secretary-General (Sekjen) Kemendikbud Number 15 of 2020 concerning Guidelines for Organizing Learning from Home in an Emergency for Spreading of CoronaVirus Disease (Kemendikbud RI no. 3 tahun 2020). Accordingly, STKIP PGRI TRENGGALEK is one of the higher education institutions in Trenggalek after the issuance of the regulation complies with government orders to study online at home to avoid the spreading of Covid-19. Implementation of teaching and learning activities carried out with an online system.

However, during student study from home, there are some problem faced by student of STKIP PGRI TRENGGALEK such as lack of student motivation, lack of media and creativity, the availability of insufficient internet network access and buy internet quotas is a burden to the college students while holding online learning during the coronavirus pandemic. Therefore, motivation is needed for students. During pandemic students need motivation. Motivation has an important role in learning because it is related to student's achievement in learning (Subakhtiasih and Putri, 2020, p. 127). Motivation is showing enthusiasm to do favorable behaviors such as language learning (Basuki, 2016, p. 44). Thus, motivation is important for a student in learning achievement during covid-19 because it is an impulse that makes them achieve a goal such as learning the language.

In response to student motivation, Mobile games are an excellent way to create motivation in learning a new language (Elaish et al., 2019, p. 1). Mobile games significantly increase students' learning motivation then compared to traditional learning strategies (Gamlo, 2019, p. 50). Mobile games as a games designed for a cell phone device, such as feature phones, smartphones, portable media player, pocket PCs, PDA, and tablet PCs (Nuryati and Prasetya, 2015, p. 1).

Hence, considering about students' motivation in learning vocabulary during study at home, this research tries to answer the question of research problem "How is Volarian game developed to engage the student's learning vocabulary at home during Covid-19 outbreak?"

RESEARCH METHOD

This research was conducted with Research and Development (R&D) and tested in Class Action Research (CAR). Educational R & D (Research and Development) as one study design for growing educational products, like curriculum, syllabus, textbooks, educational media, and so forth (Basuki, 2018, p. 21). Research and development is an industry-primarily based improvement model to attain new products and methods, after which debate is systematic, evaluated, and refined in step with the standards of effectiveness, quality, and selected requirements (Basuki, 2018, p. 70). Further, this research was tested in Class Action Research (CAR). Classroom action research (CAR) is a research that begins with a preliminary study after the problem are existing found. Then, next steps are planning, acting, observing

and reflecting (Basuki, 2018, p. 48). Here is the following figure shows the product developed.
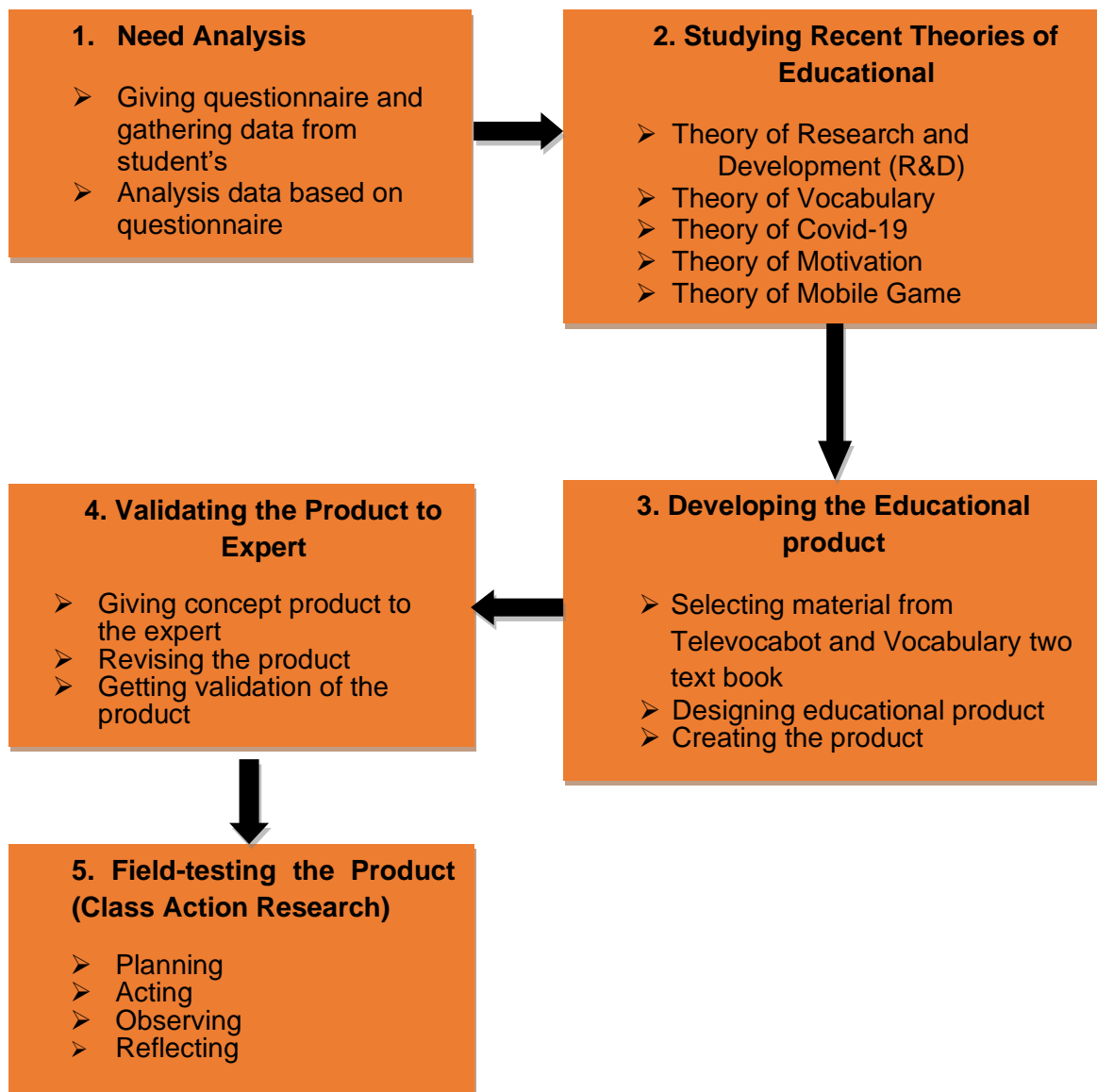

Figure 1. Development Steps of Volarian (Adapted from Mukti and Basuki, 2020: 84)

A population is all of society or units of interest; generally, there is not always information for nearly all people in a population (Hanlon and Largest, 2011, p. 7). Then, to select the subject the researcher uses a purposive sampling. Purposive sampling is originating samples from the population without randomization subject, considering strata or area, but based on a particular objective (Mukti and Basuki,

2020, p. 84). Further, the subject of this research is second semester students of the English Language Education Department of STKIP PGRI Trenggalek in the 2020/2021 academic year that consist of 30 students, 10 male students and 20 females. The researcher conducts the research from 3rd February 2021 to 4th May 2021 in STKIP PGRI Trenggalek that is located at St. Supriyadi No. 22 Trenggalek.

Meanwhile, to obtain the data, the researcher used instruments in the form of questionnaires, interview and observation sheet. The questionnaire was analyzed quantitatively. While interview and observation sheet was analyzed qualitatively. Then, the researcher conducted a validity and reliability test to get valid and reliable instruments before the researcher distributing a questionnaire to the subjects. In validity test the researcher used Pearson Product Moment correlation technique with a significance value is sig. (2-tailed) to test need analysis, pre and post-motivation questionnaire. The result of the validity test in students need analysis questionnaire that consists of 25 statements and distributed to 30 subjects are above 0.350. Then, the result of validity test in pre and post-motivation questionnaires that consist of 15 statements and distributed to 30 subjects are above 0.350. The test is value if inter-item correlation is more than 0.30 (El-Hajjar, 2018, p. 53). Thus, the result of validity test of this instrument is declared valid. Meanwhile, in reliability test, the researcher used Alpha Cronbach to get the reliable instruments before giving questionnaire to the students. Then, the result of reliability test in need analysis questionnaire that consists of 25 statements and distributed to 30 subjects is 0.937 while, the result shown in Pre and Post-Motivation Questionnaire that consist of 15 questions is 0.887. The coefficient is acceptable if the value is above 0.70 and very good if the value is more than 0.80. Thus, the result of reliability test of need analysis, pre and post motivation questionnaire indicates value 0.937 and 0.887 is declared reliable (Mojahan, 2017, p. 12). Furthermore, the questionnaire was analyzed quantitatively by using Likert Scale with 5 alternative answers. Here is following table of Linkert scale score

Table 1. Linkert scale score

Score	Answer
5	The respondents strongly agree with the statement
4	The respondents agree with the statement
3	The respondents neutral with the statement
2	The respondents disagree with the statement
1	The respondents strongly disagree with the statement

Then, after recapitulating the total score, the researcher find the interpretation based on the criteria in the following diagram
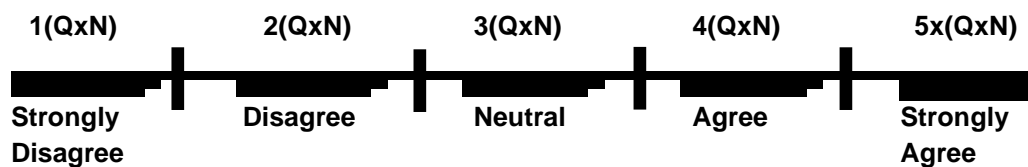
1(QxN)	2(QxN)	3(QxN)	4(QxN)	5x(QxN)
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Figure 2. Continuum diagram of students' questionnaire result

FINDINGS AND DISCUSSION

This chapter discusses the finding of initial product development, finding of expert validation and finding of field-testing the product

Finding of Initial Product Development

The researcher distributes students' need analysis questionnaire that consist of 25 questions to know the students need to learn vocabulary during distance learning. Then, the researcher get data as follow; maximum score (5 x 25 x 30) = 3750, minimum score (1 x 25 x 30) = 750, score range (3750 – 750) = 3000, total score = 2852. Here is following figure of students' need analysis questionnaire result

2852

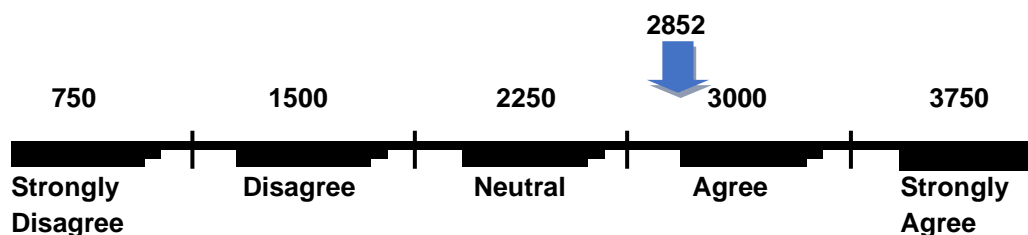| 750	1500	2250	3000	3750
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Figure 3. Continuum diagram of students' needs analysis

Accordingly, From the students' need analysis questionnaire result has been found, a total score indicated a point of 2852. The number 2852 is in the strongly agree and agree score range which means that student agree with the products design developed. Then, as the need of students to learn vocabulary during distance learning has been found. Most students agree that game are needed to engage them in learning vocabulary. Then, most students agree that games must be affordable, have a good appearance, and able to use in offline mode.

Finding of Expert Validation

After the product prototype is developed, the researcher meets experts to get evaluation, suggestions and assessment to have an acceptable product. Then, based on the expert judgment the product is validated in the form as valuing a game color is blue, color combination is purple and green emerald, template is space and school, level game should be 40 levels, font size is 24, the font used in the game should be times new roman and letter area in keyboard must be a capital letter, curriculum, competency standards, content standards, and syllabus is based on curriculum 15 of STKIP PGRI TRENGGALEK, for material organization in chapter 1 discusses words formation, chapter 2 discusses words stalks, chapter 3 and chapter 4 discusses degree of comparison, language used based on students' standard competency, game size is 25 MB, the usages of battery consumption not more than 10% per second and application features must have setting, coin, instruction and feedback. Here is following figure that shows the characteristics, contents, and features of the product developed.
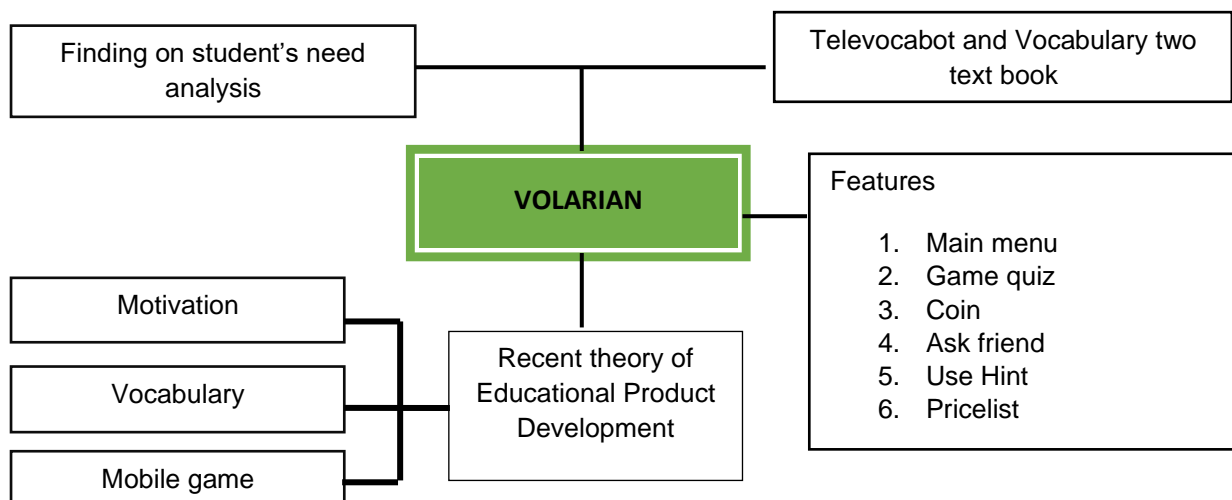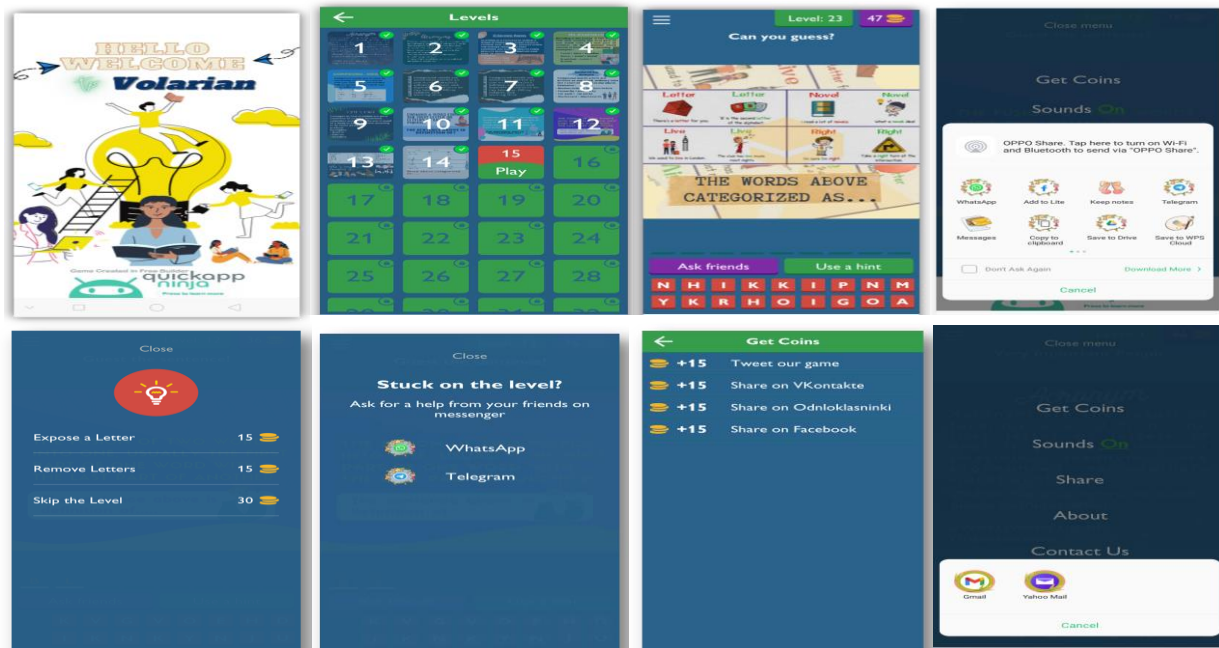
Figure 4. Characteristic, Contents and Features of the Product of Research Development

Finding of Product Field-testing

In field-testing products, the researcher conducts Class Action Research to test the effectiveness of the developed product.

Finding of Preliminary Study

In preliminary study the researcher distributes pre-motivation questionnaire that consist of 15 questions to know student condition and motivation during study at home before using Volarian. Then, from pre-motivation questionnaire result, the researcher get data as follow; maximum score (5 x 15 x 30) = 2250, minimum score (1 x 15 x 30) = 450, score range (2250 – 450) = 1800, total score = 1036. Here is following figure of pre-motivation questionnaire result.
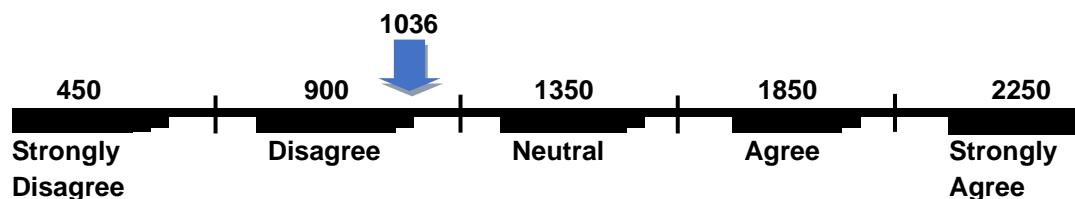

Figure. 5 Continuum diagram of pre-motivation questionnaire

Therefore, in preliminary study using a pre-motivation questionnaire, a total score indicated a point of 1036. The number 1036 is in the strongly disagree and disagree score range which that means student engagement in learning vocabulary during study at home is low.

Finding of Planning

The results of research planning the researcher has developed a lesson plan for distance learning (RPPJJ) by applying Volarian. In addition, the researcher has made an instrument to measure the effectiveness and to measure the implementation of teaching and learning activities by implementing a Volarian using an observation sheet instrument and a post-motivation questionnaire. Lastly, the researcher setting up the criteria success of this research is the engagement of the students in learning vocabulary before and after implementation of Volarian game classically which is the total score of questionnaire indicated 1800 points.

Finding of Acting

In this step, the researcher teaches students by using Volarian to develop the research plan before. Then, the results obtained from implementing acting in classroom action research are to test the effectiveness of the developed products during distance learning by implementing Volarian for four meetings. Here is following table of acting

Table 2. Table of Acting

Date	Meeting	Activity
23rd April 2021	1	by using Volarian the researcher teaches the material by forming new word.
26th April 2021	2	by using Volarian the researcher teaches the material by word stalks.
30th April 2021	3	by using Volarian the researcher teaches the material by degree of comparison (Adjective and Positives).
3rd May 2021	4	by using Volarian the researcher teaches the material by degree of comparison (Comparative and Superlative). distribute post-motivation questionnaire in the last meeting to find out students' responses to the learning process they went through using volarian.

Finding of Observing

Observation is carried out simultaneously with acting using an observation sheet to monitoring students' activity by using video call, screen shoot and screen recording. Here is the result of Observation sheet

Table 3. Table of Observation sheet

Meeting	Date	Activity
1	23/04/2021	The result from an observation sheet shows that during distance learning, the students use Volarian to compare, analyzing and to describe the type of words formation, the usage of Volarian proven by the result of screenshot, video calling and screen recordings from the students.
2	26/04/2021	The result from an observation sheet shows that during distance learning, the students use Volarian to describe definition, analyzing and implementing words stalks, the usage of Volarian proven by the result of screenshot, video calling and screen recordings from the students.
3	30/04/2021	The result from an observation sheet shows that during distance learning, the students use Volarian to describe definition and analyzing kinds of degree of comparison, the usage of Volarian proven by the result of screenshot, video calling and screen recordings from the students.
4	03/05/2021	The result from an observation sheet shows that during distance learning, the students use Volarian to analyzing kinds of degree of comparison and to implementing the usages of degree of comparison, , the usage of Volarian proven by the result of screenshot, video calling and screen recordings from the students.

Finding of Reflecting

The results of the reflecting obtained after the researcher distribute post-motivation questionnaire that consist of 15 questions to the students. From post-motivation questionnaire result, obtained data as follow; maximum score (5 x 15 x 30) = 2250, minimum score (1 x 15 x 30) = 450, score range (2250 – 450) = 1800, total score = 1853
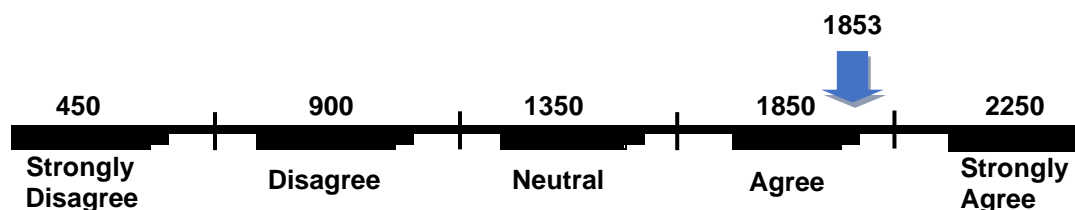

Figure. 6 Continuum diagram of post-motivation questionnaire

Based on the result of post-motivation questionnaire result above, total score indicated a point of 1853. The number 1853 is in the agree and strongly agree score range which that means after the student using Volarian can engaging them to learn vocabulary during study at home. Then the researcher comparing pre-motivation and post-motivation result using bar chart diagram to know differences after and before using volarian whether the result meet criteria of success or not. Here is following figure of pre and post-motivation questionnaire diagram.
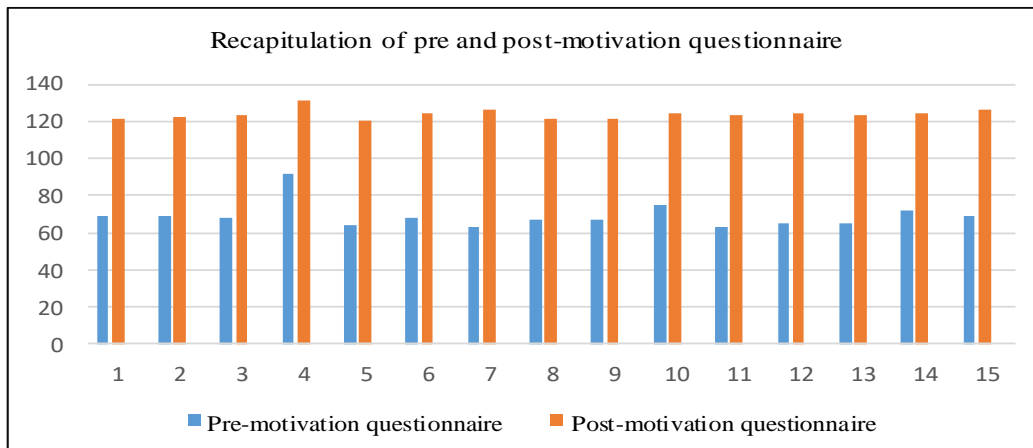
Figure 7. Pre- and post-motivation questionnaire comparison diagram

In conclusion, based on recapitulation of pre-motivation and post-motivation diagram above show that post-motivation questionnaire (1853) result is higher than pre-motivation questionnaire (1036). Thus, it concluded that the results of field-testing by using CAR (Class Action Research) method prove that there is an engagement of student in learning vocabulary during distance learning before using Volarian and after using Volarian. Therefore, the research stopped because it had met the criteria of success.

CONCLUSION

The media development in this research is VOLARIAN (Vocabulary Learning Application Ninja) as a game to engage EFL learners learning vocabulary during a covid-19 outbreak. Volarian design as educational game for android and PC. The game composition is adapted from Televocabot and vocabulary two textbook that include the chapters of forming new words (Acronyms, Clipping, Blending, Coining and Compounding), Words Stalks (Synonym, Antonym, Homophones, Homographs) and Degree of Comparison. Then, each level is completed with exercises.

Furthermore, Volarian established from the result of students need analysis, some recent theories of education, research and development method, class action research step, evaluation, suggestion and assessment from expert validation. Then, the expert suggested revising the font size and duration of the splash screen. Thus, the researcher revises the product and givesit to the subject when the product attains qualification.

Then, in field-testing the researcher conducts CAR (Class Action Research) method to test the effectiveness of this product in the 2nd semester of English Language Education Department of STKIP PGRI Trenggalek in the 2020/2021 academic year. The result in filed-testing shows that most students are excited using this product. It was proven from the result of the observation sheet that they use Volarian to learn vocabulary.

In conclusion, this research has been able to answer the question of research problem "How is Volarian game developed to engage the student's learning vocabulary at home during Covid-19 outbreak?". Moreover, this research has successfully developed Volarian (Vocabulary Learning Application Ninja) game to engage EFL learner's vocabulary learning during the covid-19 outbreak.

REFERENCES

Basuki, Y., Damayanti, A., & Dewi, S. U. (2018). Vocabulary coursebook for EFL learners of higher education in Indonesia. International *Journal of Education and Literacy Studies*, 6(4), 122-128, http://journals.aiac.org.au/index.php/IJELS/article/view/4912

Basuki, Y. (2016). *The Use of Peer -Assessment of Reading Aloud to Improve the English Department Students' Motivation on Pronunciation Class of Stkip Pgri Trenggalek.* 42 Dewantara, 2 (1), https://www.researchgate.net/publication/334545233_THE_USE_OF_PEER_ASSESSMENT_OF_READING_ALOUD_TO_IMPROVE_THE_ENGLISH_DEPARTMENT_STUDENTS'_MOTIVATION_ON_PRONUNCIATION_CLASS_OF_STKIP_PGRI_TRENGGALEK

EL Hajjar, S.TB. (2018). *STATISTICAL ANALYSIS: INTERNAL-CONSISTENCY RELIABILITY AND CONSTRUCT VALIDITY.* International Journal of Quantitative and Qualitative Research Methods, Vol.6, No.1, pp.46-57,https://www.eajournals.org/wp-content/uploads/Statistical-Analysis-Internal-Consistency-Reliability-and-Construct-Validity.pdf

Elaish, M.M., Ghani, N.A., Shuib, L. (2019). *Development of a mobile game application to boost students' motivation in learning English vocabulary*. IEEE ACCESS, (Online), 19 (1):1-13, https://www.researchgate.net/publication/330376720_Development_of_a_Mobile_Game_Application_to_Boost_Students'_Motivation_in_Learning_English_Vocabulary

Gamlo, N. (2019). *The Impact of Mobile Game-Based Language Learning Apps on EFL Learners' Motivation*. Canadian Center of Science and Education 12(4), https://pdfs.semanticscholar.org/c2be/97c232dfe5cad453bd16f34f0a0d9d1308a7.pdf

Hanlon. B, & Larget. (2011). *Samples and Populations*. Department of Statistics University of Wisconsin—Madison

Herdiana D. (2020). *Social Distancing: Indonesian Policy Reponse to The Corona Virus Disease 2019 (COVID-19)*. Sekolah Tinggi Ilmu Administrasi Cimahi. (Online), 17 (1): (93-110) (https://www.researchgate.net/publication/342637611_SOCIAL_DISTANCING_INDONESIAN_POLICY_REPONSE_TO_THE_CORONA_VIRUS_DISEASE_2019_COVID-19

Johan. R., & Harlan, J. (2014). *Education Nowadays*, international Journal of Educational Science and Research (IJSR), 4(5), 51-58, https://www.researchgate.net/publication/274704027_EDUCATION_NOWADAYS ,

Kemendikbud. (2020). *Surat edaran sekertaris jendral kemendikbud nomor 15 tahun 2020*. Kemendikbud, (Online), http://repositori.kemdikbud.go.id/18738/1/PEDOMANBDR_REVISI9JUNI.pdf

Mohajan, H. (2017). *Two Criteria for Good Measurements in Research: Validity and Reliability*. Annals of Spiru Haret University, (Online), 17(3): 58-82, https://mpra.ub.uni-muenchen.de/83458/1/MPRA_paper_83458.pdf

Mukti, B.D.F., & Basuki, Y. (2020). *Vivoice: An Effort to Promote Efl Learners' Self-Regulated Learning During the Covid-19 Outbreak*. English Teaching Journal: A journal of English Literature, Linguistics, and Education, (Online), 8 (2): 82-90 https://www.researchgate.net/profile/Yudi_Basuki2/publication/346625035_VIVOICE_An_Effort_to_Promote_EFL_Learners'_SelfRegulated_Learning_during_the_COVID19_Outbreak/links/5fc9f52045851568d13a8953/VIVOICE-An-Effort-to-Promote-EFL-Learners-Self-Regulated-Learning-during-the-COVID-19-Outbreak.pdf

Nuryati, F.X., & Prasetya H. (2015). *Mobile Game Effectiveness for Game Enthusiasts Who Have Little Spare Time to Play* Games. Sisforma, 1(2), 10-12, http://journal.unika.ac.id/index.php/sisforma/article/view/404/361

Sackey, & Barfi, (2021). *The Impact of Covid-19 Pandemic on the Global Economy: Emphasis on Poverty Alleviation and Economic Growth*. Jiangsu University, Vol. 5, No. 1, https://www.researchgate.net/publication/348162269_The_Impact_of_Covid-

19_Pandemic_on_the_Global_Economy_Emphasis_on_Poverty_Alleviation_a
nd_Economic_Growth

Singh, S. (2020). *Covid-19*: *A Deadly Virus.* International Journal of Medical Science
and Clinical Research, 2(2), 2664-7761,
https://www.researchgate.net/publication/342602138_COVID19_A_Deadly_Vir
us

Susanto, A. (2017). *The Teaching of Vocabulary: A Perspective*. Batam. Universitas
Putera, (online), Vol. 1 (2):10.22216,
https://www.researchgate.net/publication/320571421_the_teaching_of_vocabul
ary_a_perspective

Undang Undang Republik Indonesia, No. 20 Tahun 2003. Sistem Pendidikan
Nasional.

Viera, R.T. (2017). The importance of vocabulary knowledge in the production of
written texts: a case study on EFL language learners. *Technical University of
Cotopax*, 1390-3659,
https://www.researchgate.net/publication/316148312_The_importance_of_voc
abulary_knowledge_in_the_production_of_written_texts_a_case_study_on_EF
L_language_learners