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Analysis of mathematical problem solving ability mathematical problem solving ability in terms of adversity quotient in problem based learning model class VIII Junior High School 2 Delitua

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ABSTRACT

This study aims to determine the mathematical problem solving ability of students in terms of Adversity Quotient through the application of Problem Based Learning model in class VIII SMP Negeri 2 Delitua. This type of research uses qualitative research with descriptive type. The subjects used in this study amounted to 6 students, namely 2 subjects with high ability, 2 subjects with medium ability, and 2 subjects with low ability. The data collection techniques used were observation sheets, Adversity Quotient questionnaires, problem solving ability tests, interviews and documentation. Data processing and analysis using the Miles and Huberman technique which consists of 3 stages, namely data reduction, data presentation, and conclusion drawing or verification. The results showed that the Problem Based Learning (PBL) learning model was effectively applied to the mathematical problem solving ability of class VIII students of SMP Negeri 2 Delitua marked by the fulfillment of all indicators of students' mathematical problem solving ability. The mathematical problem solving ability of students with the climber type in the very good category, the camper type in the good category and the quitters type in the less category.

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INTRODUCTION

The low problem solving ability of students is evidenced by the results of the Programme For International Student Assessment (PISA) survey organized by the Organization For Economic Co-Operation And Development (OECD) which Indonesia has participated in since 2015. As quoted from the OECD, at the time of the 2018 PISA test, there were an estimated 4,439,086 15-year-old children in Indonesia. Of these, 85% or 3,768,508 children belonged to the PISA population. The remaining 15% or 670,578 children could not be categorized as part of the PISA population due to a number of conditions, namely: 1) children aged 15 years who are not in school or are not students, 2) students aged 15 years who have not reached grade 7 or grade 1 of junior high school /

equivalent, and 3) students aged 15 years who are educated in special schools (SLB) because they are children with special needs. In 2018, the average score in science was 396 with an OECD average score of 489 (PISA, 2018).

The results obtained by Indonesia in the PISA study are still very far from what is expected. Based on the PISA results, the factor that causes the low achievement of Indonesian students in PISA is the weak mathematical problem solving skills of students in answering non-routine or high-level problems (Hutabarat, 2017). In the implementation of observations and interviews conducted by researchers at SMP Negeri 2 Delitua, it shows that most students still have difficulty when working on math problems, especially on problem solving problems. This is evidenced by the administration of tests conducted to determine the initial abilities of students at SMP Negeri 2 Delitua.

Judging from the test results given to 23 students at SMP Negeri 2 Delitua, where only 30% of students were only able to solve the test questions given correctly and precisely. The results of interviews with several students at SMP Negeri 2 Delitua, found the problem that students are difficult in understanding mathematics learning, students are difficult in solving story problems due to lack of understanding. This proves that students' mathematical problem solving skills are still low. The results of student scores in daily tests are certainly not a measuring tool for whether the student is good or bad at solving problems. The researcher gives a test in the form of a problem-solving ability question to test whether the student's problem-solving ability is good or bad. Before that, the researcher must ascertain whether the prospective subject has done problem solving activities or not. So the researcher discussed with the math subject teacher at SMP Negeri 2 Delitua.

Based on the results of interviews with teachers at SMP Negeri 2 Delitua, students there easily give up in thinking, even tend to answer carelessly, thus causing the answers given by students to be less precise, even though the arithmetic and geometric row material is classified as relatively easy material, because even though students do not master the concept, they can answer by calculating the row manually without a formula. However, there are several factors that affect mathematical problem solving ability, including Adversity Quotient (AQ). AQ is a student's ability to deal with problems. According to Stoltz (2004) quoted from (Arrohman, 2022) suggests that Adversity Quotient is a difficulty faced by someone so that not a few people are discouraged from facing these challenges.

AQ is an indicator to involve how strong a person survives in facing difficulties, how a person can overcome problems, whether he is able to come out as a winner or retreat as a failure. In line with this theory (Izzati & Utami, 2024) the higher the adversity quotient, the higher the student's ability to solve math problems, and vice versa, if the adversity quotient is low, the ability to solve math problems is also low.

Adversity Quotient (AQ) as a non-cognitive variable plays an important role in influencing mathematical problem-solving abilities, especially in the concept of facing challenges. AQ, which measures an individual's ability to bounce back from difficulties, can be compared to other affective variables such as self-efficacy and persistence. Although all of these variables can improve problem-solving abilities, AQ emphasizes the ability to face and overcome difficulties, while self-efficacy is more about self-confidence, and persistence in persisting in the face of challenges, (Izzati & Utami, 2024).

In its level, AQ has three types, namely quitters campers climbers. Quitters tend to avoid and reject challenges and problems. Campers are able to accept change and provide ideas but are limited to maintaining the comfort that has been obtained. While the type of climbers is a type of person who is reliable, able to welcome the opportunity to move forward in every endeavor. Based on this theory, where AQ is a person's persistence in facing all obstacles in achieving success, it makes researchers interested in analyzing students' problem solving abilities in terms of students' AQ intelligence.

In order to achieve learning effectively and efficiently, it is necessary to determine the right learning strategy. So that students who lack interest in learning will feel suitable because they become more understanding of how to teach a good teacher. In order for all of that to be achieved, a teacher or lecturer at least needs to prepare the following things: 1) develop learning objectives; 2) develop learning activities; 3) choose the right method or model and technique, 4) choose the right media; 5) choose teaching materials that are in accordance with the achievement of competencies; 6) choose the right learning resources; and 7) determine targeted assessment instruments, (Chaniago, 2020).

From the results of observations and interviews with mathematics teachers at SMP Negeri 2 Delitua, it is known that so far the learning model applied by mathematics teachers at SMP Negeri 2 Delitua is a conventional learning model with lecture and question and answer learning. Given that problem-solving skills are very important for students to have in the mathematics learning process. One effort to improve students' mathematical problem-solving abilities is to use innovative learning methods, (Lusiana, Suprapto, & Sukristini, 2021).

There are many learning models and approaches that can be used by teachers to improve students' problem solving skills, one of the learning models is Problem Based Learning (PBL). Problem Based Learning is learning that makes problems as a basis for students to learn. According to Barrow and Kelson, Problem Based Learning is designed to assist students in building a flexible and broad knowledge base, developing effective problem solving skills, developing independent learning as a lifelong learning skill, becoming effective collaborators and being intrinsically motivated to learn, (Zainal, 2022).

Based on the explanation above, this research related to students' mathematical problem solving ability in terms of adversity quotient through the Problem Based Learning learning model is interesting to discuss. Both adversity quotient and mathematical problem solving ability have a role in the mathematics learning process. If students have adversity quotient in learning, then students will be able to analyze a problem in learning, not easily discouraged, and able to solve problems by finding solutions from various sources, so that the material studied can be explored extensively by itself, and increase knowledge for the students themselves. Similarly, the Problem Based Learning model is applied in accordance with problems in mathematics learning that are in accordance with students' mathematical problem solving skills.

RESEARCH METHODOLOGY

This research uses qualitative research with descriptive type. Qualitative research is an inquiry strategy that emphasizes the search for meaning, understanding, concepts, characteristics, symptoms, symbols and descriptions of a phenomenon, focus and multimethod, natural and holistic, prioritizing quality, using several methods, and presented in a narrative. In simple terms, it can be said that the purpose of qualitative research is to find answers to a phenomenon or question through the systematic application of scientific procedures, (Sidiq & Choiri, 2019).

The subjects in this study were in accordance with the characteristics expected by the researcher, namely taken from class VIII students at SMP Negeri 2 Delitua. From the Daily Test scores of grade VIII students, 2 subjects with high abilities, 2 subjects with medium abilities, and 2 subjects with low abilities were taken. To determine high, medium, and low ability subjects, an initial ability test can be given to all students in one class. The researcher took the subjects based on the scores obtained by students through the criteria of student ability levels and assessment scales and conducted discussions with mathematics teachers at SMP Negeri 2 Delitua to determine the subjects to be selected by the researcher. Administering a questionnaire that is valid and reliable. AQ will help measure the level of AQ

In this study, the instrument used to analyze data on students' mathematical problem solving ability by using a problem solving ability test. In addition, to support the data collection

process, researchers also conducted observations, interviews, Adversity Quotient questionnaires, and follow-up based on the results of the questionnaire to students as research subjects. Before being given, the test questions were tried out in a trial class to find out which questions met the validity, reliability, differentiating power and level of difficulty.
Qualitative data analysis in this study according to Miles and Huberman (1992) which divides into three streams of activities that occur simultaneously (Hardani, 2020), namely data reduction, data display and verification.

RESULTS AND DISCUSSIONS

Application of Problem Based Learning Model

Before conducting a problem-solving ability test of students, observations were made of teachers during the learning process by applying a problem-based learning model. From the results of observations of teacher activities in class VIII SMP Negeri 2 Delitua that researchers conducted, which was taught by the observer Mrs. Theresiana Lukiana, S.Pd from the beginning to the end of the activity in applying the problem-based learning model to mathematics learning.

Phase 1: Problem Orientation, the indicator of orientation to the problem has three categories of statements. In the category of mentioning and explaining learning objectives, these activities are carried out by the teacher well. The category of motivating students to be actively involved in learning, the activity is carried out by the teacher well. Then for the category of exploring students' initial abilities with questions related to the material to be conveyed, the activity was carried out by the teacher very well. From the results of observations in phase 1, namely orientation to the problem, it can be seen that the teacher can implement it well.

Phase 2: Organizing students to learn, indicators of organizing students to learn there are two categories of statements. In the category of organizing the use of time for class discussions appropriately, these activities are carried out by the teacher well. In the category of guiding students to understand the problems in the LKS, the activity was carried out by the teacher well too. From the results of stage 2 observations, namely organizing students to learn, it can be seen that the teacher can implement it well.

Phase 3: Guiding individual and group investigations, indicators of guiding individual and group investigations have four categories of statements. In the category of guiding students to open companion books for math lessons, these activities are carried out by the teacher very well. In the category of guiding and motivating students to collect information, the activity was carried out by the teacher well. For the category of trying to get every student actively involved in learning, the activity was carried out by the teacher well. Furthermore, in the category of guiding students to find solutions to problem solving, the activity was carried out by the teacher very well. From the observation results in phase 3, namely guiding individual and group investigations, it can be seen that the teacher can implement it very well.

Phase 4: Developing and presenting work, indicators of developing and presenting results have two categories of statements. In the category of guiding students to write down the results of problem solving on worksheets, the activity was carried out by the teacher very well. In the category of asking relevant questions to help students find answers to the problems discussed, the activity was carried out by the teacher well. From the observation results at stage 4, namely developing and presenting results, it can be seen that the teacher can implement it very well.

Phase 5: Analyzing and evaluating the problem-solving process, indicators of analyzing and evaluating the problem-solving process have two categories of statements. In the category of providing feedback on the problems that have been discussed, the activity is carried out by the teacher well. In the category of asking students to provide conclusions about the learning activities that have been carried out, the activity is carried out by the teacher well. From the results of stage 5 observations, namely analyzing and evaluating the problem solving process well.

Problem Solving Ability Based on Adversity Quotient

After obtaining the research subject, then the subject was given an adversity quotient questionnaire which had been validated by mathematics experts and had been declared valid. The purpose of giving an adversity quotient (AQ) questionnaire is to obtain the type of AQ intelligence of class VIII students. Subjects were given a questionnaire conducted during math learning.

The research questionnaire was made based on Adversity Quotient indicators, namely self-control (control), origin and self-recognition (origin and ownership), reach (reach), endurance (endurance). This research questionnaire assessment is given a rating scale, namely SS (Strongly Agree), S (Agree), CS (Moderately agree), TS (Disagree) and STS (Strongly Disagree). The Adversity Quotient questionnaire consists of 32 questions with a maximum score of 5 on each question. Previously the questionnaire had been validated by a validator, which consisted of aspects of Control, Origin and ownership, reach and endurance.

From the questionnaire results obtained, 2 students of the climber type, 2 students of the campers type and 2 students of the quiters type were taken for further analysis. The results of the students' AQ ability questionnaire scores are presented in the table below.

Table 1. Students adversity quetient ability

Student Code	AQ Score	Type
A1	102	*Climber*
A2	101	*Climber*
A3	98	*Campers*
A4	94	*Campers*
A5	75	*Quiters*
A6	79	*Quiters*

From the results of data processing, the results of Adversity Quotient on each aspect are as follows.

a. Control, the higher the AQ score in the control dimension shows that students feel able to have a strong level of control over bad events, so that the greater the perceived control will lead to a more empowered and proactive approach. In learning, it is possible that students will experience difficulties both in mastering material, school assignments, and dynamics in class with other students.

The higher the AQ score on the control dimension in learning, is able to describe the ability of students to be able to overcome the events experienced. As an illustration, when learning is carried out using the group discussion method, students with higher AQ in the control aspect will be able to overcome when there are differences of opinion in the discussion process. In contrast to students who are less able to overcome difficulties, they will think that the problems given during the discussion cannot be solved at all so that students tend to follow other people's opinions.

b. Origin and Ownership, origin is related to guilt which has two functions: guilt helps one learn and guilt leads to regret where regret is a very strong motivator. Meanwhile, ownership (recognition) relates to the responsibility that must be borne as a result of adversity. So this dimension shows the extent to which a person can bear the consequences of any situation without disputing the cause.

The higher the student's AQ in this aspect, it shows that students are able to take full responsibility for the events encountered during learning, as an illustration when students are given assignments as students will take full responsibility for doing the assignments, even though they get difficulties students will think that everything must have a way to solve. The ability of students to respond well to responsibility will be seen in the final results in the future. Students with lower AQ in this aspect will tend to give up thinking and not take responsibility for their obligations so that when they get the final results they tend to blame themselves, feel that they are stupid, and do not try to learn from others.

c. Reach is the individual's ability to reach out and limit the difficulties faced so as not to reach other parts of life. The higher the score on this dimension shows the possibility of students being able to limit the range of problems to the event at hand, being able to place it in proportion so that students will appear more empowered and feelings of overwhelm will decrease. Conversely, the lower the score on this dimension shows that students perceive bad events as disasters that enter other areas of life, triggering a heavy burden and making students feel helpless.

If this is represented in learning, it illustrates that the higher the AQ in this aspect, the students will see that the failure of student achievement only happens at that time and will not be repeated. As an illustration when students get a math exam score below the KKM, students with high AQ in the reach aspect will think that this event will not happen in other subjects. This means that the problem faced does not affect other areas and students tend to improve so that it does not happen again. Vice versa, the lower the AQ in this aspect, the student will see that the failure will make the student's future immediately destroyed at that time and when getting negative assumptions from others because of unsatisfactory grades, the student will feel insecure and can eliminate the student's enthusiasm.

d. Endurance is a person's ability to perceive that this difficulty will last. This dimension shows that the more difficulties last for a long time, it shows that a person will be helpless to make changes and will be seen as a failure, a loser, a procrastinator. The higher the score on this dimension shows that students are able to see difficulties and their causes as something that is temporary, fleeting, and less likely to happen again so that it will increase students' energy and optimism to act. Meanwhile, the lower the score on this dimension shows that students view difficulties and their causes as something permanent and long-lasting so that it will cause students to give up easily and lose hope which ultimately makes it difficult for students to take action. In learning, it is possible that students will find learning difficulties.

Students' Problem Solving Ability

Students with the climber type on average have mathematical problem solving skills in the good category. Students with the climber type have the highest percentage acquisition in the indicator of planning a solution with a very good category. For indicators of understanding the problem, students with the climber type are classified as very good at understanding the problem. For indicators of carrying out the plan, students with the climber type are in the excellent category. The fourth indicator, namely the re-examination, students with the climber type are still very good in carrying out the re-examination process.

Students with moderate camper type on average have mathematical problem solving skills in the sufficient category. Students with moderate adversity quotient have the highest percentage in the indicator of planning a solution in the good category. In the indicator of understanding the problem, students with Camper type are in the category of less in understanding the problem in the problem. For the indicator of carrying out the plan, students with the Camper type are in the excellent category. students with the Camper type are in the good category in the recheck indicator.

Then students with quiters type have mathematical problem solving skills in the less category. Students with low adversity quotient have the highest percentage acquisition on the indicator of understanding the problem which is included in the excellent category. In the indicator of understanding the problem, students with the type of quiters are still in the excellent category. For the indicator of planning a solution, students with the type of quiters are in the less category. As for the reexamination indicator, students with the type of quiters obtained the lowest percentage which was in the very poor category.

In line with (Hasibuan & Zahari) who stated that the Problem Based Learning (PBL) model is very effective in improving students' mathematical problem solving abilities. Similarly, (Rahmaini, Destini & Dwi, 2024) stated that the Problem Based Learning (PBL) model is proposed

as a potential solution to increase students' motivation to learn mathematics. PBL presents real-world problems as a learning context, which can increase students' engagement, problem-solving skills, and learning independence. With direct relevance to real life, PBL is expected to increase students' interest and motivation in learning mathematics and help achieve the desired learning goals.

CONCLUSION

Based on the results that have been carried out, the following conclusions can be drawn. The Problem Based Learning (PBL) Learning Model is effectively applied to the mathematics problem solving skills of VIII grade students of SMP Negeri 2 Delitua marked by the fulfillment of the four stages of problem solving skills, namely understanding the problem, making a solution plan, implementing a solution plan, and re-examining the results.

The mathematical problem solving ability of students with the climber, camper and quiters types has a different level of intelligence. Climber type students (high) are able to fulfill all problem solving indicators, namely understanding the problem, making a solution plan, implementing the solution plan, and re-examining the results. Camper-type students (medium) are only able to complete three problem solving indicators, namely, making a solution plan, implementing a solution plan and checking back. While quiters (low) type students are only able to complete one problem solving indicator, namely understanding the problem.

For further researchers, it is expected to be a reference source for further research. These findings can be replicated or tested by conducting studies at other levels of education or other subjects. This replication or trial can be done by applying the same PBL model, with problems relevant to different subjects and measuring student learning outcomes using AQ. The development of contextual and personal AQ-based learning strategies in junior high schools (SMP) can be done by adjusting learning methods to the conditions and needs of students. This approach emphasizes the adjustment of materials and learning methods to the background of students, their interests, and the relevance of the material to everyday life.

References

Amaliah, A. (2019). Pengaruh Adversity Quotient Dan Berpikir Kreatif Terhadap Kemampuan Memecahkan Masalah Matematika Siswa Kelas VII SMP Negeri 8 Palopo. *(Skripsi Institut Agama Islam Negeri (IAIN)).* Palopo.

Arrohman, M. Z. (2022). Analisis Kemampuan Pemecahan Masalah Matematis Ditinjau dari Adversity Quotient (AQ) Pada Materi Barisan Aritmetika dan Barisan Geometri Di SMA Negeri 10 Bungo. *(Skripsi Universitas Jambi).* Jambi.

Asrul, R. A. (2015). *Evaluasi Pembelajaran.* Bandung: CitaPustaka Media.

Chabibah, L. N., Siswanah, E., & Tsani, D. F. (2019). Analisis kemampuan pemecahan masalah siswa dalam menyelesaikan soal cerita barisan ditinjau dari adversity quotient. *PYTHAGORAS: Jurnal Pendidikan Matematika, 14 (2)*, 199-210. https://doi.org/10.21831/pg.v14i2.29024.

Chaniago, A. F. (2020). Analisis Kemampuan Pemecahan Masalah Matematis Ditinjau Dari Adversity Quotient Pada Model Pembelajaran Problem Based Learning Berbantuan Edmodo. *(Skripsi Universitas Negeri Semarang).* Semarang: https://lib.unnes.ac.id/38918/1/4101416099.pdf.

Hardani. (2020). *Metode Penelitian Kualitatif & Kuantitatif.* Yogyakarta: CV. Pustaka Ilmu Group.

Hasibuan, H. L., & Zahari, C. L. (2023). Pengembangan Perangkat Pembelajaran Berbasis Problem Based Learning (PBL) Untuk Meningkatkan Aktivitas dan Kemampuan Pemecahan Masalah Matematika Siswa SMP Negeri 1 Sosopan. *Jurnal MathEducation Nusantara, 6(2)*, 169-176.

Izzati, L., & Utami, R. (2024). Pengaruh Adversity Quotient Terhadap Kemampuan Pemecahan Masalah Siswa. *Prosiding Diskusi Panel Nasional Pendidikan Matematika*, 45-54.

Kurniawan, A., Setiawan, D., & Hidayat, W. (2019). Analisis Kemampuan Pemecahan Masalah Matematis Siswa Smp Berbantuan Soal Ontekstual Pada Materi Bangun Ruang Sisi Datar. *JPMI Jurnal Pembelajaran Matematika Inovatif, 2(5)*, 271-282. .

Lusiana, R., Suprapto, E., & Sukristini, I. (2021). Efektivitas Model Pembelajaran Problem Based Learning (PBL) terhadap Prestasi Belajar Matematika Ditinjau dari Adversity Quotient (AQ). *Edumatica: Jurnal Pendidikan Matematika, 11(2)*, Print ISSN: 2088-2157, Online ISSN: 2580-0779.

Lusiana, R., Suprapto, E., & Sukristini, I. (2021). Efektivitas Model Pembelajaran Problem Based Learning (PBL) terhadap Prestasi Belajar Matematika Ditinjau dari Adversity Quotient (AQ). *Edumatica: Jurnal Pendidikan Matematika, 11(2)*, 55-63.

Magdalena, I. (2021). Analisis Validitas, Reliabilitas, Tingkat Kesulitan Dan Daya Beda Butir Soal Ujian Akhir Semester Tema 7 Kelas III SDN Karet 1 Sepatan. *Bintang : Jurnal Pendidikan dan Sains 3(2)*.

Mulya, Y. C., & Fantiro, F. A. (2023). Penggunaan Model Pembelajaran Problem Based Learning berbasis Performa Pelajar Pancasila dalam Peningkatan Pembelajaran Matematika Operasi Hitung Perkalian dan Pembagian Pecahan Pada Peserta Didik Kelas V SD Negeri 1 Junrejo Kota Batu. *Pendas : Jurnal Ilmiah Pendidikan Dasar, 8(2).*, ISSN Cetak : 2477-2143 ISSN Online : 2548-6950 .

Ningsih, E., Anggraini, R. D., & Kartini. (2023). Penerapan Model Problem Based Learning untuk Meningkatkan Kemampuan Pemecahan Masalah Matematis Siswa Kelas VII-E SMP Negeri 23 Pekanbaru. *Jurnal Cendekia: Jurnal Pendidikan Matematika, 7(3).*, 2250-2260. E-ISSN: 2579-9258 P-ISSN: 2614-3038 .

Prayitno, S. (2019). *Buku Ajar Evaluasi Pembelajaran Matematika* . Lombok: Duta Pustaka Ilmu.

Rahmaini, Y., Destini, R., & Dwi, D. F. (2024). Pengembangan Bahan Ajar Berbasis Digital Dengan Model Problem Based Learning Untuk Meningkatkan Motivasi Belajar Mata Pelajaran Matematika Kelas V MIS Al-Amin. *Pendas: Jurnal Ilmiah Pendidikan Dasar, 9(2)*, 499-511.

Rahmawati, N. D. (2022). *Pemecahan Masalah Literasi Matematis Ditinjau dari Adversity Quotient (AQ)*. Jombang: CV Jejak.

Setiawan, O. (2019). Kemampuan Metakognisi Dalam Pemecahan Masalah Persamaan Kuadrat Ditinjau Dari Adversity Quotient Pada Siswa Kelas X. *Naskah Publikasi Universitas Muhammadiyah Surakarta*.

Sidiq, U., & Choiri, M. M. (2019). *Metode Penelitian Kualitatif Di Bidang Pendidikan.* Ponorogo: CV. Nata Karya.

Srirahmawati, I. (2021). Peran Guru Sebagai Fasilitator dalam Mengasah Penalaran Matematika Siswa SDN 29 Dompu Tahun Pembelajaran 2020/2021 . *Ainara Journal (Jurnal Penelitian dan PKM Bidang Ilmu Pendidikan), 2(2).*, 108-113. E-ISSN: 2746-7767 .

Stoltz, P. G. (2007). *Adversity Quotient: Mengubah Hambatan Menjadi Peluang*. Jakarta: PT. Grasindo.

Sugiyono. (2018). *Metode Penelitian Kuantitatif, Kualitatid dan R&D*. Bandung: Alfabeta.

Zainal, N. F. (2022). Problem Based Learning pada Pembelajaran Matematika di Sekolah Dasar/ Madrasah Ibtidaiyah. *Jurnal Basicedu, 6(3)*, 3584 - 3593. p-ISSN 2580-3735 e-ISSN 2580-1147.