

ABSTRAK

Anisa Putri Salsabela. 2021. Kajian Etnomatematika pada Permainan Tradisional Gobak Sodor dan Implementasinya pada Pembelajaran Matematika SMP. Skripsi. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma Yogyakarta.

Tujuan dari penelitian ini adalah 1) mendeskripsikan aspek-aspek filosofi pada permainan tradisional gobak sodor, 2) mendeskripsikan aktivitas fundamental matematis menurut Bishop pada permainan tradisional gobak sodor, dan 3) mengetahui implementasi kajian etnomatematika pada permainan tradisional gobak sodor terhadap pembelajaran matematika SMP.

Jenis penelitian yang digunakan adalah penelitian deskriptif kualitatif. Objek dalam penelitian ini adalah aspek filosofi, aktivitas fundamental matematis menurut Bishop, dan permasalahan kontekstual matematika pada permainan tradisional gobak sodor. Subjek dalam penelitian ini adalah pendiri Kampung Dolanan Nusantara dan salah satu warga Kampung Dolanan yang pernah memainkan permainan tradisional gobak sodor. Metode pengumpulan data dalam penelitian ini menggunakan wawancara, observasi, dan dokumentasi. Teknik analisis yang digunakan adalah reduksi data, kategorisasi, sintesisasi, dan penyusunan kesimpulan.

Hasil dari penelitian ini ada tiga hal. 1) Adanya filosofi pada gerakan, aturan dan strategi bermain, dan arena bermain. Filosofi pada gerakan adalah melatih kemampuan menyerang dan bertahan. Filosofi pada aturan dan strategi bermain adalah sikap sportivitas, kerja sama, kerja keras dan sabar. Filosofi pada arena bermain terdapat pada bentuknya berupa petak-petak berbentuk persegi panjang yang dianggap sebagai benteng-benteng yang harus dilindungi mengajarkan sikap bertahan dan bersaing. 2) Adanya enam aktivitas fundamental matematis menurut Bishop, yakni *counting*, *measuring*, *designing*, *locating*, *playing*, *explaining* yang terlihat dari gerakan, aturan dan strategi bermain, dan arena bermain. 3) Implementasi kajian matematika pada permainan tradisional gobak sodor terhadap pembelajaran matematika SMP adalah pembuatan soal kontekstual. Soal kontekstual tersebut terdiri dari materi transformasi geometri untuk SMP kelas IX sebanyak 2 soal; materi bilangan untuk SMP kelas VII sebanyak 3 soal; materi peluang untuk SMP kelas VIII sebanyak 2 soal; materi kesebangunan dan kongruen untuk SMP kelas IX sebanyak 2 soal; materi garis dan sudut untuk SMP kelas IX sebanyak 3 soal; dan materi luas dan keliling bangun datar untuk SMP kelas VII sebanyak 1 soal.

Kata kunci: Etnomatematika, Permainan tradisional gobak sodor, Aktivitas Fundamental Matematis menurut Bishop

ABSTRACT

Anisa Putri Salsabela. 2021. *Ethnomatematics Study on Traditional Game of Gobak Sodor and it's Implementantation in Junior High School Mathematics Learning. Undergraduated Thesis. Mathematic Study Program, Departmen of Mathematics and Sciences Education, Faculty of Teacher Training and Education, Sanata Dharma University Yogyakarta.*

The aims of this research are 1) to describe the philosophical aspects of the traditional game of gobak sodor, 2) to describe the fundamental mathematical activities according to Bishop in the traditional game of gobak sodor, and 3) to know the implementation of the study of mathematics in the traditional game of gobak sodor for junior high school mathematics learning.

The type of this study was qualitative descriptive research. The objects in this research are philosophical aspects, mathematical fundamental activities according to Bishop, and contextual problems of mathematics in the traditional game of gobak sodor. The subjects in this study were the founder of Kampung Dolanan Nusantara and one of the residents of Kampung Dolanan who had played the traditional game of gobak sodor. Data collection methods in this research used interviews, observations, and documentation. The analysis technique used in this research were data reduction, categorization, synthesis, and drawing conclusions.

The results from this study was, three points 1) The existence of a philosophy of movement, rules and playing strategies, and the playing field. The philosophy of the movement was to train the ability to attack and defend. The philosophy on the rules and strategies of playing were sportsmanship, cooperation, hard work and patience. The philosophy of the playground is found in its shape in the form of rectangular plots which were considered as fortresses that must be protected and teach defensive and competitive attitudes.

2) There were six fundamental mathematical activities according to Bishop, namely counting, measuring, designing, locating, playing, explaining which can be seen from movements, rules and playing strategies, and the playing ground.

3) The implementation of the study of mathematics in the traditional game of gobaksodor for junior high school mathematics learning was the creation of contextual questions. The contextual questions consist of 2 questions for geometrytransformation for SMP class IX; the number material for SMP class VII is 3 questions; opportunity material for SMP class VIII as many as 2 questions; material for similarity and congruence for grade IX junior high school as many as 2 question, line and angle material for grade IX junior high school as many as 3 questions; and the material for the area and circumference of a flat shape for class VII SMP was 1 question.

Keywords: Ethnomatematics, gobak sodor traditional games, Mathematical Fundamental Activities according to Bishop