ANALISIS *DECISION MAKING* SISWA SMP DALAM MENYELESAIKAN SOAL MATEMATIKA TIMSS

TESIS

Diajukan untuk memenuhi sebagian syarat untuk memperoleh gelar Magister Pendidikan Matematika

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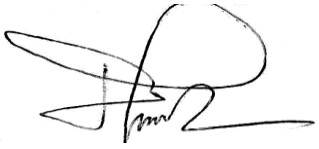

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ABSTRAK

Sela Mawarti (2020). Analisis *Decision Making* Siswa SMP dalam Menyelesaikan Soal Matematika TIMSS.

Penelitian ini bertujuan untuk mengetahui strategi *decision making*, kategori *decision making*, dan capaian siswa dalam menyelesaikan soal matematika TIMSS. Capaian siswa Indonesia dalam UN dan TIMSS, khususnya dalam bidang matematika masih tergolong rendah. Lemahnya kemampuan *decision making* berimplikasi pada ketidakmampuan siswa dalam menyelesaikan masalah dan tidak tercapainya tujuan pembelajaran matematika. Dengan demikian, rendahnya capaian siswa dapat disebabkan lemahnya kemampuan *decision making*. Penelitian yang melibatkan 132 siswa kelas VIII di salah satu SMP Negeri di Kabupaten Sragen tahun ajaran 2019/2020 ini merupakan penelitian kualitatif deskriptif dengan metode survei. Soal matematika TIMSS yang dipublikasikan oleh *The International Association for the Evaluation of Educational Achievement* digunakan sebagai instrumen. Kriteria strategi *decision making* difokuskan pada tiga cara, yaitu strategi *compensatory*, *noncompensatory*, dan campuran. Kriteria kategori *decision making* difokuskan pada empat cara, yaitu berdasarkan *intuitive*, *empirical*, *heuristic*, dan *rational*. Pernyataan pengarah untuk mengungkap strategi *decision making* dan kategori *decision making* terintegrasi dalam lembar jawaban pada masing-masing butir soal. Hasil penelitian menunjukkan bahwa siswa cenderung menggunakan strategi *compensatory decision making* untuk menyelesaikan soal pilihan ganda dan cenderung menggunakan kategori *heuristic decision making* untuk menyelesaiakan soal *constructed response*. Selain *decision making,* penelitian ini juga menunjukkan bahwa capaian siswa dalam menyelesaikan soal matematika TIMSS pada bentuk pilihan ganda lebih tinggi dibandingkan dengan capaian siswa pada soal bentuk *constructed response*. Hasil penelitian ini dapat menjadi masukan dalam rangka perbaikan mutu pembelajaran matematika di SMP, khususnya dalam *decision making*.

Kata Kunci: strategi *decision making,* kategori *decision making*, TIMSS

ABSTRACT

Sela Mawarti (2020). Decision Making Analysis of Junior High School Students in Solving TIMSS Mathematical Problems.

This study aims to determine the decision making strategy, the decision making category, and the students achievement in solving TIMSS mathematical problems. The achievement of Indonesian students in the UN and the TIMSS, especially mathematics, is still poor. Weak decision making abilities have implications for the inability of students to solve problems and not achieving the goals of learning mathematics. Thus, low student achievement can be caused by weak decision making abilities. The study, which involved 132 VIII-grade students in one of the state junior high schools in Sragen Regency, was a descriptive qualitative research using a survey method. The TIMSS mathematical problems published by The International Association for the Evaluation of Educational Achievement is used as an instrument. The decision making strategy criteria are focused on three ways, namely compensatory, noncompensatory, and mixed strategies. Decision making category criteria are focused on four bases, namely intuitive, empirical, heuristic, and rational. Steering statements to uncover decision making strategies and decision making categories are integrated in the answer sheets on each item. The results show that the students tend to use compensatory decision making strategies to solve multiple choice questions and tend to use the heuristic decision making category to solve constructed response questions. In addition to decision making, this study also shows that the students' achievements in solving TIMSS mathematical problems in the multiple choice form is higher than the students' achievement in the constructed response form questions. The results of this research can enhance the quality of students mathematics learning in junior high school, particularly in decision making.

Keywords: decision making strategy, decision making category, TIMSS

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