**VALIDITAS DAN RELIABILITAS INSTRUMEN ASESMEN KEMAMPUAN BERPIKIR INTUITIF MATEMATIS SISWA**

**Tayudi1 \***

1,Universitas Pasundan

\*cs1.jagocell@gmail.com

**Abstrak**

Tujuan dari penelitian ini adalah untuk menguji validitas dan reliabilitas instrumen asesmen kemampuan berpikir intuitif matematis siswa. Penelitian ini merupakan salah satu bagian dari tahapan Model penelitian dan pengembangan Four-D yaitu tahapan design. Instrumen yang sudah dirancang dikonsultasikan kepada ahli untuk nantinya dibuktikan validitas dan reliabilitas. Uji ahli atau Validasi, dilakukan dengan responden para ahli perancangan instrumen atau produk. Selanjutnya analisis validitas konten dilakukan dengan menganalisis hasil validasi konten oleh para ahli dengan menggunakan pendekatan rasio validitas isi (Content Validity Ratio/CVR). Studi reliabilitas yang melibatkan rater biasanya dinamakan dengan kesepakatan antar rater (inter rater agreement) atau reliabilitas antar rater (inter-rater reliability). Hasil penelitian menunjukan bahwa validasi umum dari ke-empat penilai terhadap instrumen asesmen kemampuan berpikir intuitif matematis yaitu dapat digunakan dilihat dari nilai expert judgment, tidakada yang mendapatkan skor maksimal 20, skor terbesar ada pada aspek kesesuaian bahasa dengan persentase 90%. Hasil dalam validasi isi untuk perangkat asesmen unjuk kerja dianalisis dengan menggunakan Validitas isi Lawshe dimana standar kevalidan CVR tergantung pada jumlah SME. Nilai CVR harus memenuhi 0,99 agar butir dapat dinyatakan valid. Hasil dari perhitungan ICC menggunakan SPSS v.20 di dapat. Hasil analisis menunjukkan rata-rata kesepakatan antar rater sebesar 0,200 sedangkan untuk orang rater konsistensinya adalah 0.500 yang itu artinya mempunyai stabilitas yang moderate.

**Kata kunci:** Asesmen kemampuan berpikir intuitif, Instrumen, validitas, reliabilitas

**Abstract**

The purpose of this study was to test the validity and reliability of the instrument for assessing students' mathematical intuition. This research is part of one of the stages of the four-dimensional research and development model, namely the design stage. The instruments that have been designed are consulted with experts to later prove their validity and reliability. expert test or validation, carried out with respondents who are experts in instrument or product design. Furthermore, content validity analysis is carried out by analyzing the results of content validation by experts using the content validity ratio (CVR) approach. Reliability studies involving raters are usually called "inter-rater agreements" or "inter-rater reliability." The results showed that the general validation of the four assessors of the instrument for assessing mathematical intuitive thinking skills was that it could be used from the point of view of expert judgment. No one got a maximum score of 20, and the biggest score was in the aspect of language suitability with a percentage of 90%. The results of content validation for the performance assessment tool were analyzed using Lawshe's content validity, where the validity standard of the CVR depends on the number of SMEs. The CVR value must meet 0.99 so that the items can be declared valid. The results of the ICC calculations using SPSS version 20 are obtained. The results of the analysis show that the average agreement among raters is 0.200, while their consistency is 0.500, which means that they have moderate stability..

**Keywords:**Assessment of intuitive thinking skills, instruments, validity, reliability

**Referensi**

Adamura, F., & Susanti, V. D. (2018). Penalaran Matematis Mahasiswa dengan Kemampuan Berpikir Intuitif Sedang dalam Memecahkan Masalah Analisis Real. *Jurnal Edukasi Matematika Dan Sains*. https://doi.org/10.25273/jems.v6i2.5366

Basadur, M., Runco, M. A., & Vegaxy, L. A. (2000). Understanding how creative thinking skills, attitudes and behaviors work together: A causal process model. *Journal of Creative Behavior*. https://doi.org/10.1002/j.2162-6057.2000.tb01203.x

BSNP. (2010). Paradigma Pendidikan Nasional Abad XXI. In *Paradigma Pendidikan Nasional Abad XXI*.

Burnett, C. (2007). *Deliberate intuition : Giving intuitive insights their rightful place in the creative problem solving thinking skills model*. *3*, 236–253. http://www.bridgepointeffect.com/wp-content/uploads/2012/12/Deliberate-Intuition-CIM.pdf

Clements, M. D., & Cord, B. A. (2013). Assessment Guiding Learning: Developing Graduate Qualities in an Experiential Learning Programme. *Assessment and Evaluation in Higher Education*, *38*(1), 114–124. https://doi.org/10.1080/02602938.2011.609314

Dreyfus, T., & Eisenberg, T. (2020). Intuitive Functional Concepts: A Baseline Study on Intuitions. *Journal for Research in Mathematics Education*. https://doi.org/10.5951/jresematheduc.13.5.0360

Etika, E. D., Sujadi, I., & Subanti, S. (2016). Intuisi Kelas VII SMP Negeri 1 Nganjuk dalam Pemecahan Masalah Matematika Ditinjau Dari Adversity Quotient ( Aq ). *Jurnal Elektronik Pembelajaran Matematika*, *4*(5), 563–574.

Fitriana, D. A., & Supahar, S. (2019). Developing an Assessment Instrument of Mathematical Problem-Solving Skills in Senior High School. *International Journal of Trends in Mathematics Education Research*. https://doi.org/10.33122/ijtmer.v2i3.81

Fleiss, J. L. (1975). Measuring Agreement between Two Judges on the Presence or Absence of a Trait. *Biometrics*. https://doi.org/10.2307/2529549

LAWSHE, C. H. (1975). A QUANTITATIVE APPROACH TO CONTENT VALIDITY. *Personnel Psychology*. https://doi.org/10.1111/j.1744-6570.1975.tb01393.x

Mardapi, D. (2012). Pengukuran Penilaian dan Evaluasi Pendidikan. *Yogyakarta: Nuha Medika*, *45*.

METCALFE, A. W. S. (2011). Cognitive Psychology: A Student’s Handbook (6th Ed.) by M. W. Eysenck and M. T. Keane. *British Journal of Psychology*. https://doi.org/10.1111/j.2044-8295.2010.02010.x

munir. (2012). *Model Penalaran Intuitif Siswa*. *November*, 978–979.

Muniri, M. (2018). Peran Berpikir Intuitif dan Analitis dalam Memecahkan Masalah Matematika. *Jurnal Tadris Matematika*. https://doi.org/10.21274/jtm.2018.1.1.9-22

Nieveen, N., & Folmer, E. (2013). Formative evaluation in educational design research. *Educational Design Research. Part A: An Introduction*.

Nitko, A. J., & Brookhart, S. M. (2011). Educational assessment of students. *Human Movement Science*. https://doi.org/10.1016/j.humov.2005.02.001

Pratiwi, N. D., Setyarsih, W., Fisika, J., Matematika, F., Ilmu, D., Alam, P., Surabaya, U. N., & Kunci, K. (2015). Pengembangan Instrumen Evaluasi Berbasis Taksonomi Structure of the Observed Learning Outcome (SOLO) Untuk Menentukan Profil Kemampuan Siswa dalam Memecahkan Masalah Fluida Statis. *Jurnal Inovasi Pendidikan Fisika (JIPF) Nurul Dwi Pratiwi*.

Purnomo, Y. W. (2014). Assessment-Based Learning : Sebuah Tinjauan untuk Meningkatkan Motivasi Assessment-Based Learning : Sebuah Tinjauan untuk Meningkatkan Motivasi Belajar dan Pemahaman Matematis. *Sigma Journal*, *VI*(June).

R, A. L. (1985). Three Coefficients for Analysing Reliability and Validity of Rating. *Educational and Psychological Measurement*, *45*, 131–142. https://doi.org/10.1177/07399863870092005

Sabbagh, S. A. (2016). Childhood Students’ Creativity in Mathematics Class in Jordan. *American Journal of Educational Research*.

Streiner, D. L., & Norman, G. R. (2008). Health Measurement Scales: A practical guide to their development and use. In *Health Measurement Scales: A Practical Guide to their Development and Use*. https://doi.org/10.1093/acprof:oso/9780199231881.001.0001

Thiagarajan, S. (1974). Instructional development for training teachers of exceptional children. In *A sourcebook*.

Ulumudin, I., & Fujianita, S. (2019). The Implementation of Attitude Assessment in Curriculum 2013 at Elementary Schools. *Jurnal Penelitian Dan Evaluasi Pendidikan*, *23*(1), 46–56. https://doi.org/10.21831/pep.v23i1.23391

Wess, R., Klock, H., Siller, H. S., & Greefrath, G. (2021). Test Quality. In *International Perspectives on the Teaching and Learning of Mathematical Modelling*. https://doi.org/10.1007/978-3-030-78071-5\_4

Williams, G. (2008). Introduction to research in the health sciences (5th edition). *British Dental Journal*. https://doi.org/10.1038/sj.bdj.2008.313

Wilson, M. (2004). Constructing measures: An item response modeling approach. In *Constructing Measures: An Item Response Modeling Approach*. https://doi.org/10.4324/9781410611697

Yudha, R. P. (2020). *Asesmen Unjuk Kerja Geometri,*. CV Budi Utama.

Yusup, F. (2018). Uji Validitas dan Reliabilitas Instrumen Penelitian Kuantitatif. *Jurnal Tarbiyah : Jurnal Ilmiah Kependidikan*. https://doi.org/10.18592/tarbiyah.v7i1.2100