

CIRI PSIKOMETRIK INSTRUMEN LALUAN KERJAYA GURU (Psychometric Characteristics of Teacher's Career Track Instrument)

SITI SARAH BAHAROM* & ADIBAH ABDUL LATIF

ABSTRAK

Struktur laluan kerjaya guru yang baharu diperkenalkan bagi mengekalkan motivasi dan minat guru dalam sistem pendidikan. Objektif kajian adalah mengukur ciri psikometrik Instrumen Laluan Kerjaya Guru versi 1.0 (ILKEG 1.0) yang menggunakan skala lima pemeringkatan. ILKEG digunakan untuk mengukur kecenderungan guru dalam memilih laluan kerjaya berdasarkan kompetensi. Ciri psikometrik yang diuji dalam kajian ini meliputi aspek kesahan kandungan, kesahan konstruk, kebolehpercayaan item dan kesesuaian skala. Fasa penetapan konsep dan pembangunan item telah mengenal pasti enam dimensi berkaitan pengukuran kompetensi guru yang dibina berdasarkan Model Pengukuran Kompetensi Guru (terdiri daripada tiga konstruk: Pengetahuan, Kemahiran dan Nilai Profesionalisme), iaitu Pembelajaran dan Pengajaran, Ujian dan Pentaksiran, Pengurusan Bilik Darjah, Pembelajaran Profesionalisme, Kepimpinan Instruksional dan Pembangunan Sumber Manusia. Sebanyak 92 item telah diadaptasi daripada Standard Kompetensi Pegawai Perkhidmatan Pendidikan dan Deskripsi Tugas Pegawai Perkhidmatan Pendidikan yang dibangunkan oleh Kementerian Pendidikan Malaysia (KPM). Analisis kebolehpercayaan antara penilai digunakan untuk menguji kesahan kandungan ILKEG 1.0. Indeks Fleiss Kappa yang diperoleh mencatatkan nilai persetujuan yang tinggi, iaitu 0.89-1.00 bagi kesemua dimensi. Walau bagaimanapun, dua item dicadangkan untuk ditukar dan 15 item perlu ditambah baik. Kajian ini melibatkan 50 orang guru sekolah menengah yang dipilih secara rawak dari sebuah sekolah menengah di Wilayah Persekutuan Putrajaya. Data dianalisis menggunakan Model Pengukuran Rasch. Dapatan analisis menunjukkan ILKEG 1.0 mempunyai ciri kesahan konstruk yang baik dan kebolehpercayaan yang tinggi, iaitu 0.91 dan indeks pengasingan item 3.16. Kesahan konstruk diperhatikan melalui i) keseragaman dimensi (julat nilai eigen 1.6-2.1; % varians kasar > 60% dan % varians tanpa penjelasan < 15%); ii) polariti item bernilai positif; dan iii) julat nilai kesesuaian item 0.02-1.62. Hasil penilaian menunjukkan enam item perlu digugurkan dan lapan item yang mempunyai nilai kesesuaian item yang tidak menepati piawaian perlu diperbaiki bagi menyokong ciri kesahan konstruk. Analisis kesesuaian skala pula menunjukkan dua julat kategori didapati mempunyai nilai perbezaan struktur kalibrasi < 1.4, seterusnya menyumbang kepada pembangunan ILKEG versi 2.0 yang terdiri daripada 86 item dengan skala tiga pemeringkatan.

Kata kunci: laluan kerjaya guru; ciri psikometrik; kesahan kandungan; kesahan konstruk; kesesuaian skala

ABSTRACT

A new structure of Teacher Career Track is developed to keep teachers' interest and motivation in educational system. This study aims to measure the psychometric characteristics of Teachers' Career Track Instrument Version 1 (TCTI 1.0) with five agreement levels. TCTI 1.0 used for measuring teachers' preferences to determine their career track based on competency. The psychometric characteristics involved in this study are content validation, construct validation, item reliability, and rating scale. The concept and item formation phase identified six dimensions of Teacher's Competence Measurement (consists of three constructs: Knowledge, Skill and Professionalism) which are Teaching and Learning, Assessment, Classroom Management, Professional Learning, Instructional Leadership and Human Resource Development. A total of 92 items were adapted from School Teachers' Competency Standards and Teachers' Job Description developed by Ministry of Education Malaysia. Inter Raters Reliability analysis was used to assess TCTI 1.0 content validation. The Fleiss Kappa

agreement coefficient value obtained was 0.89-1.00, thus showing a very good level of agreement. However, two items were replaced and 15 items were improved. This study involved 50 secondary school teachers in the Federal Territory of Putrajaya. Data were analysed using Rasch Measurement Model. The findings resulted in six items being discarded. TCTI 1.0 showed a good construct validity and high reliability (item reliability 0.91; item separation 3.16). TCTI 1.0 construct validity was assessed by i) dimensionality (eigenvalue range 1.6-2.1; % raw variance > 60%, and % unexplained variance < 15%); ii) item polarity = + value; and iii) item fit (Infit MNSQ index) of 0.02-1.62. Six items were discarded and eight misfit items were refined to support construct validity. Two out of five categories used shown structure calibration differences index < 1.4 thus resulted in the new version of TCTI 2.0 that consists of 86 items with three rating scale.

Keywords: teacher's career track; psychometric characteristics; construct validity; content validity; rating scale

Rujukan

- Abdul Rahin H., Ahmad Johari S., Jamaluddin R. & Rosliza H. 2014. Persepsi guru terhadap profesion perguruan masa kini. *Seminar Pasca Siswazah UTM*.
- Adibah A. L. 2013. Pembangunan instrumen penilaian akhlak pelajar di institusi pengajian tinggi awam. Tesis Doktor Falsafah. Universiti Teknologi Malaysia.
- Azman I, Wan Aishah W. M. N. & Raja Rizal Iskandar R. H. 2018. Tingkah laku proaktif meningkatkan kejayaan kerjaya pekerja. *Sains Humanika* **10**(2): 53-63.
- Azrilah A. A., Mohd Saifudin M. & Azami Z. 2013. *Asas Model Pengukuran Rasch: Pembentukan Skala & Struktur Pengukuran*. Bangi: Penerbit Universiti Kebangsaan Malaysia.
- Bacon R., Holmes K. & Palermo C. 2017. Exploring subjectivity in competency-based assessment judgements of assessors. *Nutrition and Dietetics* **74**(4): 357-364.
- Baharuddin J., Adnan J. & Hanifah M. 2017. Kompetensi Guru ISMP (Sejarah) Universiti Pendidikan Sultan Idris dalam Pendekatan Standard Guru Malaysia (SGM). *Journal of Social Science* **3**:60-70.
- Bond T. G. & Fox C. M. 2015. *Applying the Rasch Model: Fundamental Measurement in the Human Sciences* Ed. ke-3. New York: Routledge Taylor & Francis.
- Cohen J. 1968. Weighted kappa: Nominal scale agreement with provision for scaled disagreement or partial credit. *Psychological Bulletin* **70**(4): 213-220.
- Cohen R. J., Swerdlik, M. E. & Sturman E. D. 2013. *Psychological Testing and Assessment: An Introduction to Test and Measurement*. Ed. ke-8. New York: McGraw Hill.
- Cook M. 2016. *Personel Selection: Adding Value Through People - A Changing Picture*. Ed. ke-6. Chichester: Wiley Blackwell.
- Creed P. A. & Hood M. 2015. The development and initial validation of a scale to assess career goal discrepancies. *Journal of Career Assessment* **23**(2): 308-317
- Creswell J. W. 2012. *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (4th ed.). Boston: Pearson.
- Ghazali D. & Sufean H. 2016. *Metodologi Penyelidikan dalam Pendidikan. Amalan dan Analisis Kajian*. Kuala Lumpur: Penerbit Universiti Malaya.
- Hallinger P., Adams D., Harris A. & Jones M. S. 2018. Review of conceptual models and methodologies in research on principal instructional leadership in Malaysia: A case of knowledge construction in a developing society. *Journal of Educational Administration* **56**(1): 104-126.
- Hennekam S. 2016. Competencies of older workers and its influence on career success and job satisfaction. *Employee Relations* **38**(2): 130-146.
- Hoff K. A., Briley D. A., Wee C. J. M. & Rounds, J. 2017. Normative changes in interests from adolescence to adulthood: A meta analysis of longitudinal studies. *American Psychological Association* **144**(4): 426-451.
- KPM 2013. *Pelan Pembangunan Pendidikan Malaysia 2013 - 2025*. Putrajaya: Kementerian Pendidikan Malaysia.
- KPM 2016. *Dokumen Awal Pelan Induk Profesionalisme Keguruan*. Putrajaya: Kementerian Pendidikan Malaysia.
- Linacre J. M. 1994. Sample size and item calibration stability. *Rasch Measurement Transactions* **7**(4): 328.
- Linacre J. M. 2016. Dimensionality investigation - an example. <https://www.winsteps.com/winman/multidimensionality.htm>. (21 Mei 2019).
- Min H., Zickar M. & Yankov G. 2018. Personality and individual differences understanding item parameters in personality scales: An explanatory item response modeling approach. *Personality and Individual Differences* **128**(2018): 1-6.
- Master B. 2014. Staffing for success: linking teacher evaluation and school personnel management in practice.

- Educational Evaluation and Policy Analysis* **36**(2): 215–229.
- McIlveen P. P. & Perera H. N. 2016. Career optimism mediates the effect of personality on teachers' career engagement. *Journal of Career Assessment* **24**(4): 623–636.
- Messick S. 1994. The interplay of evidence and consequences in the validation of performance assessments. *Educational Researcher* **23**(2): 13–23.
- Mohamed Najib A. G. 2016. *Prinsip Asas Penilaian Program Pendidikan*. Skudai: Penerbit UTM.
- Mohd Effendi@Ewan M. M. & Ahmad Zamri K. 2015. Pengujian ciri psikometrik item USMEQ-I. *Jurnal Teknologi* **75**(1): 251–257.
- Mohd Faiz M. Y. & Jamal N. Y. 2016. Model pengukuran kompetensi kerja guru. *ICECRS* **1**(2016): 13–20.
- Mohd Ibrahim K., Mohammed Sani I. & Rosemawati M. 2015. Kompetensi kepemimpinan instruksional di kalangan pengetua sekolah di negeri Selangor. *Jurnal Kepimpinan Pendidikan* **2**(3):1-14.
- Mohd Yusri I. & Aziz A. 2014. Model kepemimpinan pengajaran pengetua dan kompetensi pengajaran. *Jurnal Kurikulum & Pengajaran Asia Pasifik* **2**(1): 11-25.
- Moore D. A. (2017). How to improve the accuracy and reduce the cost of personnel selection. *California Management Review* **60**(1): 8–17.
- Muhammad A. K., Gooden M. A. & Davis J. E. 2016. Culturally responsive school leadership: a synthesis of the literature. *Review of Educational Research* **86**(4): 1272–1311.
- Nurmawati A. B. 2016. Ciri-ciri psikometrik instrumen dan profil kualiti kehidupan kerja guru sekolah rendah di Aceh, Indonesia dan di tiga negeri utara Malaysia. Tesis Doktor Falsafah. Universiti Sains Malaysia.
- Podgornik V. & Vogrinc J. 2017. The role of headteachers, teachers, and school counselors in the system of quality assessment and assurance of school work. *SAGE Open April-June* (2017): 1–13.
- Rodziah H. 2012. Penilaian sendiri kompetensi guru untuk jawatan guru cemerlang di dalam daerah Johor Bahru. Tesis Sarjana. Universiti Teknologi Malaysia.
- Roselena M. & Mohd Izham M. H. 2015. Kepimpinan berkualiti: Perspektif mengenai kompetensi yang diperlukan untuk memimpin dengan berkesan. *Jurnal Pengurusan* **45**(2015): 143-154.
- Sackett P. R., Lievens F., Van Iddekinge C. H. & Kuncel N. R. 2017. Individual differences and their measurement: A review of 100 years of research. *Journal of Applied Psychology* **102**(3): 254–273.
- Schmidt F. L., Oh I. S. & Shaffer J. A. 2016. the validity and utility of selection methods in personnel psychology: practical and theoretical implications of 100 years of research findings. <https://www.researchgate.net/publication/309203898> (10 September 2018).
- Shantini A/P R., Muhammad Faizal A. G. & Norfariza M. R. 2018. Tahap kompetensi pemimpin sekolah di sekolah jenis kebangsaan Tamil dalam daerah terpilih di Selangor. *Jurnal Kepimpinan Pendidikan* **5**(3): 34-59.
- Stumpf S. A. 2010. Stakeholder competency assessments as predictors of career success. *Career Development International* **15**(5): 459-478.
- Sutton A. & Watson S. 2013. Can competencies at selection predict performance and development needs? *Journal of Management Development* **32**(9):1023–1035.
- Tang S. M., Lim K. T., Abdull Sukor S. & Ab. Aziz Y. 2016. Hubungan keadilan penilaian prestasi dengan komitmen organisasi guru. *International Seminar on Generating Knowledge Through Research UUM-UMSIDA* **1**(2016), hlm. 139–146.
- Yang X., Kaiser G., Konig J. & Biomeke S. 2018. Measuring Chinese teacher professional competence: adapting and validating a German framework in China. *Journal of Curriculum Studies* **50**(5): 638–653.
- Zhang X. F. & Ng H. M. 2017. An effective model of teacher appraisal: Evidence from secondary schools in Shanghai, China. *Educational Management Administration & Leadership* **45**(2): 196-218.

Sekolah Pendidikan
Fakulti Sains Sosial dan Kemanusiaan
Universiti Teknologi Malaysia
83100 Skudai
Johor DT, MALAYSIA
Mel-e: sitisarahbaharom@gmail.com, p-adibah@utm.my*

*Penulis untuk dihubungi