# THE DEVELOPMENT AND VALIDATION OF MALAYSIAN SECONDARY SCHOOL STUDENTS' LEADERSHIP INVENTORY



# FACULTY OF PSYCHOLOGY AND EDUCATION UNIVERSITI MALAYSIA SABAH 2016

# THE DEVELOPMENT AND VALIDATION OF MALAYSIAN SECONDARY SCHOOL STUDENTS' LEADERSHIP INVENTORY



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# UNIVERSITI MALAYSIA SABAH

# THESIS SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

# FACULTY OF PSYCHOLOGY AND EDUCATION UNIVERSITI MALAYSIA SABAH 2016

### DECLARATION

I hereby declare that the material in this thesis is my own except for quotations, excerpts, equations, summaries and references, which have been duly acknowledged.

31 August 2016

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### CONFIRMATION

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### ABSTRACT

Leadership skill is one of the elements that is emphasised in the Malaysian Education Development Plan 2013-2025. A valid and reliable scale to measure leadership among secondary school students is still unavailable in schools and student leadership is not specifically evaluated in schools. This study aimed to develop the Malaysian Secondary School Students' Leadership Inventory (M3SLI) and to determine the related psychometric properties by using the Rasch Rating Scale Measurement Model and Hierarchical Component Model (HCM). In an effort to develop a new instrument, Design and Development Research (DDR) design provides the basis for this research design. The newly developed questionnaire was administered to 2340 students from 26 schools in four main divisions of Sabah. The validity and reliability of the M3SLI are acceptable to measure the leadership potential of secondary school students. The evidence of Differential Item Functioning (DIF) does not exist, indicates that personality, values and competencies constructs in M3SLI function similarly on different genders, school locations and forms. There are no collinearity issues in formative indicators and first order components and all the outer weight are significant. The item-person map confirmed the predictive validity of M3SLI. Eight types of leaders were proposed in this study based on their personalities, values and competencies. Re-testing of the instrument and improvement of items have to be applied before the measurement scale of M3SLI can be used as an established instrument. School administrators should be based on the student leadership profile when come to selecting head prefect or any other important leadership positions in school.

#### UNIVERSITI MALAYSIA SABAH

Keywords: Measurement, Validation, Psychometric, Scale, Student leadership

### ABSTRAK

#### PEMBANGUNAN DAN PENGESAHAN INVENTORI KEPIMPINAN PELAJAR SEKOLAH MENENGAH MALAYSIA

Kemahiran kepimpinan adalah salah satu elemen yang ditekankan dalam Pelan Pembangunan Pendidikan Malaysia 2013-2025. Skala yang sah dan boleh dipercayai untuk mengukur kepepimpinan dalam kalangan pelajar sekolah menengah masih tidak wujud dan tidak dinilai secara khusus. Kajian ini bertujuan untuk membangunkan Inventori Kepepimpinan Pelajar Sekolah Menengah Malaysia (M3SLI) dan menentukan sifat-sifat psikometrik dengan menggunakan Model Skala Penilaian Pengukuran Rasch dan Model Komponen Hierarki (HCM). Dalam usaha membangunkan instrumen baru ini, Penyelidikan Mereka bentuk dan Pembangunan (DDR) menjadi asas kepada reka bentuk kajian ini. Soal selidik diedarkan kepada 2340 orang pelajar dari 26 buah sekolah menengah di empat bahagian Sabah. Kesahan dan kebolehpercayaan M3SLI diterima untuk mengukur kepimpinan pelajar sekolah menengah. Keputusan menunjukkan kesan Differential Item Functioning (DIF) tidak wujud, ini menunjukkan konstruk personality, nilai-nilai dan kompetensi dalam M3SLI berfungsi dengan sama dalam jantina, lokasi sekolah dan tingkatan yang berbeza. Tidak terdapat isu-isu kolineariti dalam indikator formatif dan komponen peringkat pertama dan kesemua pemberat luaran adalah signifikan. Peta Item-Person menunjukkan kesahan ramalan M3SLI. Kajian ini mencadangkan lapan jenis pemimpin yang dicadangkan berdasarkan personaliti, nilai-nilai dan kompetensi. Pengujian semula instrumen dan penambahbaikan item perlu diaplikasikan sebelum skala pengukuran M3SLI boleh digunakan sebagai instrumen yang mantap. Pentadbir sekolah seharusnya memilih ketua pengawas atau jawatan pemimpin yang lain di sekolah berdasarkan profil kepimpinan pelajar.

Kata kunci: Pengukuran, Pengesahan, Psikometrik, Skala, Kepepimpinan pelajar

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