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VALIDITY AND RELIABILITY OF THE MALAY VERSION OF THE COMPREHENSIVE FEEDING PRACTICES QUESTIONNAIRE (CFPQ-M) TESTED AMONG MOTHERS OF SCHOOL CHILDREN IN THE KLANG VALLEY, MALAYSIA

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By

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VALIDITY AND RELIABILITY OF THE MALAY VERSION OF THE
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February 2012

Chairman:  Shamarina Shohaimi, PhD
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Increasing prevalence of childhood obesity has become the main health issue in Malaysia. There is a need to have improved public health preventive programs which should be started in the early childhood. Parents could be described as an obesigenic agent for children. Their feeding practices have been found to be related to childhood obesity. Hence, a valid and reliable instrument to examine parental feeding practices is needed.

The objective of this study was to examine the validity and reliability of the Comprehensive Feeding Practices Questionnaire (CFPQ), an instrument that assesses child-feeding practices. The Malay version CFPQ (CFPQ-M) was tested among 397 mothers of primary school children (Year 1-3) from schools in Selangor, Kuala Lumpur and Putrajaya.
CFPQ-M contained 12 subscales on feeding practices including monitoring (mean=3.36±0.86), emotion regulation (mean=2.04±0.75), food as reward (mean=2.72±1.12), child control (mean =2.57±0.63), modelling (mean=4.12±0.76), restriction for weight control (mean=3.34±0.95), restriction for health reasons (mean=3.86±1.20), teaching about nutrition (mean=4.24±0.80), encouraging balance and variety (mean=4.02±0.74), pressure to eat (mean score=2.89±1.00), healthy environment (mean=4.26±0.83) and involvement (mean=3.88±0.84).

A series of tests including confirmatory factor analysis (CFA) were used to examine the psychometric properties of the clinical instrument. A hypothesized model was examined and revised which was then respecified in order to get the best fitted model. A series of fit indices were used to determine a good fit model. Of 49 items, 39 items with loading factors >0.40 were retained. The CFA revealed that the final model (twelve-factor model with 39 items and 2 error covariances) displayed the best fit for our sample (Chi-square=1147, df=634, p<.05, CFI=0.900, RMSEA=0.045, SRMR=0.058).

The Cronbach’s alphas for the subscales ranged from 0.45 to 0.90. Convergent validity was obtained for most of the CFPQ-M subscales by assessing the relationships between mean scores of the subscales and child’s dietary fat intake over the past seven days, which was obtained using the self-modified Patient-centered Assessment and Counseling for Exercise Plus Nutrition (PACE+) dietary fat screener. The variables were correlated as
expected (all r>0.10, p<0.05). One week test-retest reliability of the instrument was tested using paired-sample t-test and the results were acceptable (t ranges from -1.26 to 0.86, all p>0.05).

A valid and reliable instrument is very important as it helps to explore many possible related researches and assure the quality of the data and results. The importance of the present study was further supported by a high prevalence of childhood obesity (13.9%) in the present study. This study showed that the translated instrument with some modifications was valid and reliable. The instrument will help researchers to better understand the relationships between parental feeding practices and child’s dietary intake and weight status. Various of interventions to reduce childhood obesity can be organized in order to prevent the health problems associated with childhood obesity.
Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

KESAHIAN DAN KEBOLEHPERCAYAAN BORANG SOAL SELIDIK KOMPREHENSIF TENTANG AMALAN PEMBERIAN MAKANAN VERSI BAHASA MELAYU (CFPQ-M) YANG DIUJI DI KALANGAN IBU KEPADA KANAK-KANAK SEKOLAH DI LEMBAH KLANG, MALAYSIA

Oleh

WONG YOKE WEI

Februari 2012

Pengerusi: Shamarina Shohaimi, PhD
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Tujuan utama kajian ini adalah untuk menguji kesahihan dan kebolehpercayaan Borang Soal Selidik Komprehensif Tentang Amalan Pemberian Makanan (Comprehensive Feeding Practices Questionnaire atau
CFPQ yang merupakan satu instrumen untuk mengkaji amalan pemberian makanan kepada kanak-kanak. CFPQ versi Bahasa Melayu (CFPQ-M) diuji ke atas 397 orang ibu kepada kanak-kanak sekolah rendah (Darjah 1-3) di kawasan bandar di sekitar Selangor, Wilayah Persekutuan Kuala Lumpur dan Putrajaya.

CFPQ-M mengandungi 12 faktor termasuk pemantauan (monitoring) (min=3.36±0.86), kawalatur emosi (emotion regulation) (min=2.04±0.75), makanan sebagai ganjaran (food as reward) (min=2.72±1.12), kawalan diri kanak-kanak (child control) (min =2.57±0.63), model (modelling) (min=4.12±0.76), larangan untuk mengawal berat badan (restriction for weight control) (min=3.34±0.95), larangan untuk sebab kesihatan (restriction for health reasons) (min=3.86±1.20), mengajar tentang pemakanan (teaching about nutrition) (min=4.24±0.80), menggalakkan keseimbangan dan kelperbagaian (encourage for balance and variety) (min=4.02±0.74), tekanan untuk makan (pressure to eat) (min score=2.89±1.00), persekitaran yang sihat (healthy environment) (min=4.26±0.83) and penglibatan (involvement) (min=3.88±0.84).

Satu siri penilaian termasuk analisis faktor konfirmatori (CFA) dijalankan untuk mengkaji kesahihan dan kebolehpercayaan instrumen kajian tersebut. Dengan menggunakan CFA, model hipotesis disemak dan ditentukan semula untuk mendapatkan model yang paling sesuai. Daripada 49 item, 39 item dengan faktor muatan melebihi 0.40 dikekalkan. CFA menunjukkan
model yang mengandungi 12 faktor dengan 39 item dan 2 ralat kovarians paling sesuai dengan sampel (khi kuasa dua=1147, df=634, p<0.05, CFI=0.900, RMSEA=0.045, SRMR=0.0580). Nilai Cronbach’s alpha bagi subskala berada dalam lingkungan 0.45 dan 0.90.

Kesahihan konvergen bagi kebanyakan subskala dikaji melalui pemeriksaan hubungan antara skor min subskala dengan skor min pengambilan lemak dalam makanan oleh kanak-kanak bagi tujuh hari yang lepas. Pengambilan lemak dalam makanan dikaji dengan instrumen yang bernama Patient-centered Assessment and Counseling for Exercise Plus Nutrition (PACE+) yang telah diubahsuaikan. Pembolehubah-pembolehubah tersebut berhubung secara terjangka (semua r>0.10, p<0.05). Kebolehpercayaan ujian berganda CFPQ-M diuji dengan ujian t bersandar adalah memuaskan (t= -1.26 to 0.86, semua p>0.05).

Instrumen yang sahih dan bolehpercaya adalah sangat penting kerana ia membantu meneroka banyak kajian yang berkaitan dan memastikan kualiti data dan hasil kajian. Prevalens obesiti kanak-kanak yang tinggi (13.9%) didapati dalam kajian ini meningkatkan kepentingan kajian ini. Kajian ini menunjukkan bahawa instrumen kajian yang telah diubahsuaikan adalah sahih dan boleh dipercayai. Instrumen tersebut akan membantu para penyelidik dalam pemahaman hubungan antara amalan pemberian makanan ibu bapa dan pengambilan makanan kanak-kanak serta berat
badan kanak-kanak. Program pencegahan obesiti kanak-kanak boleh diadakan supaya membantu pencegahan penyakit-penyakit yang berkaitan dengan obesiti kanak-kanak.
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Last but not least, I would like to thank my sincere friends and family, especially my parents, who give me endless care and support.
I certify that an Examination Committee has met on 2.2.2012 to conduct the final examination of Wong Yoke Wei on her thesis entitled “Validity and Reliability of the Malay Version of the Comprehensive Feeding Practices Questionnaire (CFPQ-M) Tested Among Mothers of School Children in the Klang Valley, Malaysia” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the student be awarded Master of Science Degree.

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DECLARATION

I declare that the thesis is an original work except quotations and citations which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institutions.

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WONG YOKE WEI

Date: 2 FEBRUARY 2012
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