

#### **UNIVERSITI PUTRA MALAYSIA**

FACTORS INFLUENCING HAND WASHING BEHAVIOR AMONG FOOD HANDLERS IN FOOD SERVICE OPERATIONS OF BOARDING SCHOOLS

**NORNAZIRA BINTI SUHAIROM** 

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# MASTER OF SCIENCE UNIVERSITI PUTRA MALAYSIA

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Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfillment of the Requirement for the Degree of Master of Science

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Master Science

## FACTORS INFLUENCING HAND WASHING BEHAVIOR AMONG FOOD HANDLERS IN FOOD SERVICE OPERATIONS OF BOARDING SCHOOLS

By

#### NORNAZIRA BINTI SUHAIROM

#### October 2011

Chair : Rosini Binti Abu, Ed.D

**Faculty: Educational Studies** 

Food poisoning outbreaks in schools have been linked to inadequate or lack of hygiene practices. Most reported food poisoning occurred in education and learning institution premises such as school canteens, hostels and dining halls of higher learning institution. The study aims to examine factors that relate and contribute to the hand washing behavior among food handlers in the food service operations of boarding schools. The variables studied were knowledge, attitude, subjective norms, descriptive norms, perceived behavioral control, barriers, intentions and behavior of hand washing. This study utilized an extended Theory of Planned Behavior with the addition of descriptive norms and barriers constructs. The instrument employed in this study was adapted from the instrument used in the studies which also measures people's behavior using the Theory of Planned Behavior. This study involved 146 food handlers who work in 18 hostels kitchen from two types of boarding schools in

Peninsular Malaysia which are Sekolah Berasrama Penuh (SBP) and Sekolah Menengah Kebangsaan Agama (SMKA). Cluster-stratified sampling was applied in this study.

Findings revealed that most respondents had good knowledge with score  $\geq 70\%$ (84.9%). There was no significant differences between food handlers who had received formal food hygiene training with those who had not receive any formal training. Demographic characteristic, namely age, were found to have a significant differences in food handlers' perceived behavioral control and behavior. There were significant relationships among perceived behavioral control, attitudes, descriptive norms and subjective norms towards intentions. Findings also show that there are significant relationships exist between behaviors and perceived behavioral control as well as between behaviors and knowledge. Findings indicated that attitudes, subjective norms and perceived behavioral control were positively contributed to the intention. About 20.9% of the variance in hand washing intentions could be predicted by these constructs. Intentions and perceived behavioral control contributed to the prediction of behaviors. About 9.1% of the variance in hand washing behaviors could be predicted by these two constructs. This study suggests that there is a need to improve the existing food handlers training and education in order to improve the practice of hand washing by the food handlers in the food service operations.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Master Sains

FAKTOR MEMPENGARUHI TINGKAH LAKU MEMBASUH TANGAN DALAM KALANGAN PENGENDALI MAKANAN DALAM OPERASI PERKHIDMATAN MAKANAN DI SEKOLAH BERASRAMA

Oleh

NORNAZIRA BINTI SUHAIROM

Oktober 2011

Pengerusi: Rosini Binti Abu, Ed.D

Fakulti : Pengajian Pendidikan

Kejadian keracunan makanan di sekolah sering dikaitkan dengan kurangnya amalan kebersihan dalam kalangan pengendali makanan. Kebanyakan kes keracunan makanan dilaporkan di institusi pengajian dan pembelajaran seperti kantin sekolah, dewan makan asrama serta institusi pengajian tinggi. Kajian ini bertujuan mengenal pasti faktor yang mempengaruhi dan menyumbang kepada tingkah laku membasuh tangan dalam kalangan pengendali makanan di dalam operasi perkhidmatan makanan di sekolah berasrama. Pemboleh ubah bagi kajian ini adalah pengetahuan, sikap, norma subjektif, norma deskriptif, persepsi kawalan tingkahlaku, halangan, niat dan tingkahlaku. Kajian ini menggunakan Teori Tingkahlaku Terancang yang telah ditambah dengan konstruk halangan dan norma deskriptif. Instrumen kajian diadaptasi berdasarkan instruman kajian terdahulu yang turut mengukur tingkah laku individu.

Responden kajian terdiri daripada 146 pengendali makanan dari 18 buah dapur asrama

di Sekolah Berasrama Penuh (SBP) dan Sekolah Menengah Kebangsaan Agama (SMKA) di Semenanjung Malaysia. Kaedah persampelan kelompok berstrata digunakan dalam kajian ini.

Dapatan kajian menunjukkan kebanyakan pengendali makanan memiliki pengetahuan membasuh tangan yang baik (84.9%) dengan markah  $\geq$  70%. Terdapat tiada perbezaan signifikan di antara pengendali makanan yang memiliki sijil pengendali makanan dengan kumpulan yang tidak memiliki sijil. Terdapat perbezaan signifikan dari segi faktor demografik iaitu faktor umur terhadap persepsi kawalan tingkah laku dan tingkah laku. Analisis korelasi menunjukkan hubungan signifikan wujud di antara persepsi kawalan tingkahlaku, sikap, norma deskripif dan norma subjektif terhadap niat. Hubungan signifikan juga wujud di antara tingkah laku dan persepsi kawalan tingkah laku dan juga di antara pengetahuan dan tingkah laku. Dapatan menunjukkan sikap, norma subjektif dan persepsi kawalan tingkah laku menyumbang kepada niat untuk membasuh tangan. Sebanyak 20.9% varian bagi niat membasuh tangan diramal oleh konstruk ini. Niat dan persepsi kawalan tingkah laku didapati meramalkan tingkah laku membasuh tangan. Sebanyak 9.1% varian bagi tingkah laku membasuh tangan diramal oleh konstruk ini. Kajian ini turut menyarankan agar latihan dan pendidikan sedia ada terhadap pengendali makanan diperbaiki agar amalan membasuh tangan dalam kalangan pengendali makanan dapat ditingkatkan.

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I certify that an Examination Committee met on 25 October 2011 to conduct the final examination of Nornazira Binti Suhairom on her Master of Science thesis entitled "Factors Influencing Hand Washing Behaviors among Food Handlers in the Food Service Operations of Boarding Schools" in accordance with Universities and University Collages Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U (A) 106] 15 March 1998. The Committee recommends that the student be awarded the Masters of Science.

Members of the Thesis Examination were as follows:

#### Mohd Ibrahim Nazri, PhD

Associate Professor
Science and Technical Education Department
Faculty of Educational Studies
University Putra Malaysia
(Chairman)

#### Ramlah Hamzah, PhD

Associate Professor
Science and Technical Education Department
Faculty of Educational Studies
University Putra Malaysia
(Internal Examiner)

#### Suhaida Abd. Kadir, PhD

Senior Lecturer
Science and Technical Education Department
Faculty of Educational Studies
University Putra Malaysia
(Internal Examiner)

#### Ramlee Mustapha, PhD

Professor
Faculty Technical and Vocational
Education Department
Universiti Pendidikan Sultan Idris
(External Examiner)

SEOW HENG FONG, PhD

Professor and Deputy Dean School of Graduate Studies Universiti Putra Malaysia Date: This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Masters of Science. The members of the Supervisory Committee were as follows:

#### Rosini Binti Abu, Ed.D

Associate Professor Faculty of Educational Studies Universiti Putra Malaysia (Chairman)

#### Abdullah Bin Mat Rashid, PhD

Senior Lecturer Faculty of Educational Studies Universiti Putra Malaysia ( Member )

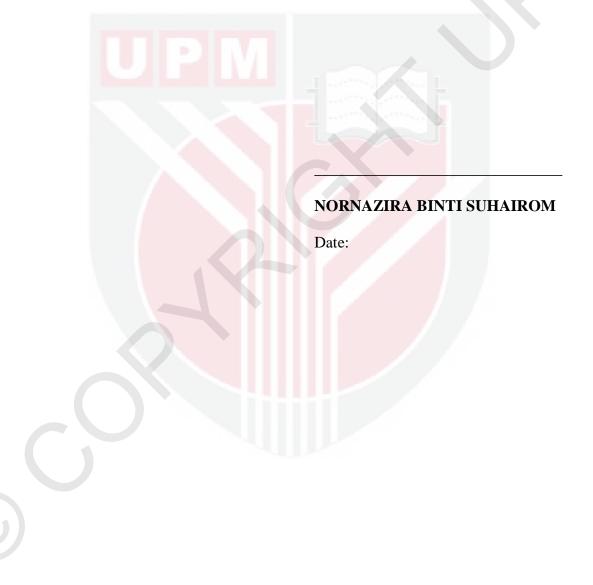
#### **BUJANG BIN KIM HUAT, PhD**

Professor and Dean School of Graduate Studies Universiti Putra Malaysia

Date:

#### **DECLARATION**

I declare that the thesis is my original work except for 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 University Putra Malaysia or other institution.



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