



**UNIVERSITI PUTRA MALAYSIA**

***MEDIATION EFFECTS OF KNOWLEDGE AND ATTITUDE ON RELATIONSHIP  
BETWEEN INTERNAL AND EXTERNAL MESSAGE RESPONSE TO RECYCLING  
CAMPAIGNS AND RECYCLING PRACTICES***

**TAN AWANG BESAR**

**FBMK 2013 29**



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RELATIONSHIP BETWEEN INTERNAL AND EXTERNAL MESSAGE  
RESPONSE TO RECYCLING CAMPAIGNS AND RECYCLING  
PRACTICES**

By

**TAN AWANG BESAR**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,  
in Fulfilment of the Requirement for the Degree of Doctor of Philosophy**

**June 2013**

Abstract of the thesis presented to the Senate of University Putra Malaysia in fulfilment of the partial requirement for the degree of Doctor of Philosophy

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**TAN AWANG BESAR**

**June 2013**

**Chairman : Professor Md. Salleh Hj. Hassan, PhD.**  
**Faculty : Modern Languages and Communication**

Communication plays a vital role in deliberating ideas and information on environmental issues. Nevertheless, the success depends on the extent of people responded to the given messages. Malaysia launched recycling campaign in November 2000 with full support from media and stakeholders. Recycling is an important form of solid waste management mechanism that promotes sustainable practices. After 13 years, people are still reluctant in adopting certain measures to reduce the impact on the environment. Even, the government admitted that the recycling campaign has failed to change people's mindset and behaviour. Understandably, communication hardly has direct influences on people behaviour except through mediation initiatives. Thus, this study attempts to examine the

mediation effect on message response (external and internal) and recycling practices. Most interestingly, this examination is carried out based on double mediation effect rather than single mediation effect.

In this study, two underlying perspectives were combined to illustrate the influence of message response on people's pro-environmental behaviour. The inclusion of message response to Knowledge, Attitudes and Practices (KAP) model as predictor to recycling behaviour would be best explained by Communication Domino Effect (CDE) Model. CDE is associated to external (message exposure and attention) and internal (message involvement and interest) message responses. A survey was conducted in 25 government agencies involving 360 civil servants. About 334 samples were found fit for further data analysis using the structural equation modeling (SEM). Besides testing for existence of double mediation effect, this study also examined the level of constructs being studied and any unique finding of demographic factor differences in relation to recycling knowledge, attitudes and recycling practice.

This study has proven that message interest was the only variable that significantly influenced (partial mediation) workplace recycling practice when mediated through specific knowledge and attitudes (upbringing). The relationship between other variables (message attention and message involvement) and recycling practices did not mediated through double mediators (recycling knowledge and attitudes),

however there was sufficient evidence to indicate the occurrence of indirect effect. The study also revealed that civil servants have a moderate level of message exposure and message attention. However, their level of message involvement and message interest was relatively high. In addition, the levels of civil servants specific recycling knowledge, recycling value and recycling practice were also high, while their recycling upbringing level was moderate. Lastly, the finding of this study helps media practitioners to craft better campaign messages on recycling practice by putting more attention to message interest with right target group.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

**KESAN PERANTARAAN PENGETAHUAN DAN SIKAP KE ATAS  
HUBUNGAN ANTARA TINDAK BALAS MESEJ DALAMAN DAN  
LUARAN KEPADA KEMPEN DAN AMALAN KITAR SEMULA**

Oleh

**TAN AWANG BESAR**

**Jun 2013**

**Pengerusi : Profesor Md. Salleh Hj. Hassan, PhD.**

**Fakulti : Bahasa Moden dan Komunikasi**

Komunikasi berperanan penting dalam mengetengahkan idea and maklumat berkaitan dengan isu-isu alam sekitar. Namun, kejayaan banyak bergantung pada tahap tindak balas orang ramai ke atas mesej yang diberikan. Malaysia telah melancarkan kempen kitar semula pada November 2000 dengan sokongan penuh daripada media dan pihak berkepentingan. Kitar semula adalah mekanisme pengurusan sisa pepejal yang mempromosikan amalan lestari. Selepas 13 tahun pelaksanaan, orang ramai masih enggan mengadaptasikan sesetengah kaedah untuk mengurangkan kesan ke atas alam sekitar. Malahan, kerajaan mengakui bahawa kempen kitar semula gagal menukar pemikiran dan perlakuan orang ramai. Amat difahami, komunikasi sukar memberi pengaruh kesan terus ke atas perlakuan orang ramai, melainkan wujudnya kesan perantaraan. Oleh itu, kajian ini berhasrat

mengkaji kesan perantaraan ke atas hubungan tindak balas mesej (luaran dan dalaman) dan amalan kitar semula. Paling penting, usaha ini dibuat berdasarkan kesan perantaraan berganda dan bukannya kesan perantaraan tunggal.

Dalam kajian ini, dua pendekatan yang digabungkan untuk menjelaskan pengaruh tindak balas ke atas mesej ke atas tingkah laku manusia yang pro kepada persekitaran. Penggabungan tindak balas mesej dengan Model KAP (Pengetahuan, Sikap dan Amalan) selaku peramal tingkah laku kitar semula mampu diterangkan dengan baik oleh Model Kesan Domino Komunikasi (CDE). CDE berkaitan dengan tindak balas luaran (pendedahan dan tumpuan mesej) dan tindak balas dalaman (penglibatan dan minat mesej). Tinjauan telah dilakukan ke atas dua puluh lima (25) agensi kerajaan melibatkan 360 orang kakitangan awam. Hanya 334 sampel didapati sesuai untuk di analisa menggunakan SEM (*structural equation modelling*). Selain menguji kewujudan kesan perantaraan berganda, kajian ini juga mengukur tahap pemboleh ubah yang diuji dan mencari penemuan unik berkaitan dengan perbezaan segi faktor demografi terhadap pengetahuan kitar semula, sikap dan amalan kitar semula.

Kajian ini telah membuktikan bahawa minat mesej adalah satu-satunya pemboleh ubah yang memberi pengaruh signifikan (perantaraan separa) ke atas amalan kitar semula di tempat kerja apabila diperantarakan melalui pengetahuan spesifik dan sikap (asuhan). Hubungan antara pemboleh ubah lain (tumpuan dan

penglibatan mesej) dan amalan kitar semula tidak mempunyai kesan perantaraan apabila melalui pemboleh ubah berganda, tetapi terdapat bukti kukuh yang menunjukkan wujudnya kesan tidak langsung. Kajian ini turut membuktikan bahawa kakitangan awam mempunyai tahap pendedahan dan tumpuan mesej yang sederhana. Walau bagaimanapun, tahap penglibatan dan minat mesej mereka adalah tinggi. Kajian juga mendapati tahap pengetahuan, nilai dan amalan kitar semula mereka adalah tinggi sementara tahap asuhan kitar semula pula adalah sederhana. Akhir sekali, penemuan kajian ini dapat membantu pengamal media untuk menghasilkan mesej kempen yang memberi penekanan lebih kepada minat mesej bersesuaian dengan mengikut kumpulan sasaran.



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I certify that a Thesis Examination Committee has met on **17 June 2013** to conduct the final examination of **Tan Awang Besar** on his thesis entitled “**Mediation effects of knowledge and attitude on relationship between external and internal message response to recycling campaigns and recycling practices**” in accordance with the Universities and Colleges Universities Act 1971 and the constitution of Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the degree of Doctor of Philosophy.

Members of the Thesis Examination Committee were as follows:

**Abdul Mua'ti@Zamri b Ahmad, PhD**

Associate Professor,  
Faculty of Modern Languages and Communication  
Universiti Putra Malaysia.  
(Chairman)

**Ezhar b Tamam, PhD**

Professor,  
Faculty of Modern Languages and Communication  
Universiti Putra Malaysia  
(Internal Examiner)

**Bahaman b Abu Samah, PhD**

Associate Professor,  
Social Science Studies Institute  
Universiti Putera Malaysia  
(Internal Examiner)

**Alexander G. Flor, PhD**

Professor,  
University of the Philippines (Open University)  
Los Banos, Laguna  
(External Examiner)

---

**NORITAH OMAR, PhD**

Assoc. Professor and Deputy Dean  
School of Graduate Studies  
Universiti Putra Malaysia

Date:

This thesis submitted to the Senate of Universiti Putra Malaysia has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

**Md. Salleh b Hj. Hassan, PhD**

Professor  
Faculty of Modern Languages and Communication  
Universiti Putra Malaysia  
(Chairman)

**Jusang Bolong, PhD**

Associate Professor  
Faculty of Modern Languages and Communication  
Universiti Putra Malaysia  
(Member)

**Ramdzani b Abdullah, PhD**

Associate Professor and Dean  
Faculty of Environmental Studies  
Universiti Putra Malaysia  
(Member)

---

**BUJANG BIN KIM HUAT, PhD**

Professor and Dean,  
School of Graduate Studies  
Universiti Putra Malaysia

Date:

## DECLARATION

### Declaration by Graduate Student

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Signature: \_\_\_\_\_ Date : **17 June 2013**

Name and Metric No.: **TAN AWANG BESAR (GS 23185)**

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This is to confirm that:

- the research conducted and the writing of this thesis was under our supervisory
- supervision responsibilities as stated in Rule 41 in Rules 2003 (Revision 2012-2013) were adhered to.

Signature: \_\_\_\_\_

**Professor Md. Salleh Hj. Hassan, PhD.**  
(Name of Chairman of Supervisory Committee)

Signature: \_\_\_\_\_

**Associate Professor Jusang Bolong, PhD.**  
(Name of Member of Supervisory Committee)

Signature: \_\_\_\_\_

**Associate Professor Ramdzani b. Abdullah, PhD.**  
(Name of Member of Supervisory Committee)

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