

# Abstracts

ASLI (Annual Serial Landmark International) Conferences on QoL2018

## *AicQoL2018PerhentianIsland*

6<sup>th</sup> AMER International Conference on Quality of Life

Perhentian Island Resort, Malaysia, 03-04 March 2018

<http://www.amerabra.org>; <https://fspu.uitm.edu.my/cebs/>; <http://www.e-iph.co.uk>

"Quality of Life in the Built and Natural Environment 6"

e-IPH  
U.K.



***Editor***

Mohamed Yusoff Abbas

***Editorial Assistants***

Diyanah Inani Azmi  
Nurul Najwa Mohdzir  
Sabrina Idilfitri

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018*  
*Perhentian Island Resort, Malaysia*

## Foreword

The 6th AicQoL2018PerhentianIslands with "*Quality of Life in the Built and Natural Environment 6*" as the main theme managed to attract an overall total of 67 numbers of approved abstracts, from three countries.

Majority of the abstracts (62 numbers or 93%) were contributed by Malaysia. This was followed by Thailand (3), and Taiwan (2). The abstracts approved were simply grouped generally under 16 sub-categories, although quite a number could have been easily placed under more than one category. The top two categories in order of popularity involved the following environments: - Local Heritage Environment and Community Environment / Social Psychology (8 each); and Children/Youth Environment, Health/Healing Environment, and Urban Environment (7 each).

The Association of Malaysian Environment-Behaviour Researchers (AMER), the main organiser of AicQoL2018, together with the co-organisers, ABRA and cE-Bs, FAPS, UiTM congratulate all abstract contributors.

### **Prof. Dr. Mohamed Yusoff Abbas**

Chair, AicQoL2018PerhentianIslands

<http://www.amerabra.org>; <https://fspu.uitm.edu.my/cebs/>

[cebsuitm@gmail.com](mailto:cebsuitm@gmail.com)

03<sup>rd</sup> March 2018

## About the Conference

### Background

The AMER (ABRA *malaysia*) support for the AcE-Bs and AicE-Bs conferences, initially organised by the Centre for Environment-Behaviour Studies (cE-Bs), FAPS, UiTM, Malaysia, and co-hosted by international colleagues within the Environment-Behaviour (EB) disciplines, have been held and planned to be away from Malaysia, worldwide.

There is a need for an annual serial internationally very relevant behavioural-themed conference in/nearby Malaysia, not only for the benefit of AMER / ABRA local members who could not participate at the AcE-Bs and AicE-Bs conferences being held worldwide, but also for potential international participants who would like to present their papers in/nearby Malaysia. What behavioural-themed can be most relevant affecting all nations than the QoL (Quality of Life)?

Thus, the timely and relevance of the annual serial back-to-back ASEAN-Turkey ASLI (Annual Serial Landmark International) Conferences on QoL. The **AicQoL**, *AMER International Conference on Quality of Life*. shall be held at the ASEAN venues, while the **AQoL**, *ABRA International Conference on Quality of Life* shall be held in Turkey, or non-ASEAN countries.

AicQoL was also strategized to coincide with AMER's AGMs. The maiden AicQoL2013Langkawi was held on 6-7 April

2013. That was followed by AicQoL2014KotaKinabalu, 04-05 January 2014; AicQoL2015Jakarta, 25-27 April 2015; AicQoL2016Medan, 25-27 February 2016, and AicQoL2017Bangkok, 25-27 February 2017.

The anchor theme of the conference is *“Quality of Life in the Built & Natural Environment”*.

## **6th AicQoL2017PerhentianIslandsTheme: Quality of Life in the Built and Natural Environment 6**

The Quality of Life (QoL) has been a central issue for decades, not only for disciplines involved in the creation of the built environment and the management of the natural environment but more importantly of the impact upon the global communities, due to the growing pressures of development. QoL shall forever not only remain central, as "quality" is subjected to continuous improvement but also subjective because the interpretation differs between communities in the more developed regions as compared to those in developing regions. The QoL concept is also linked to Sustainable Development, such that unless we engage with more sustainable practices, the QoL in both the built and natural environments would soon be deteriorated.

AicQoL2018PerhentianIsland contributes to the debate and solutions on the QoL concept as a key element of responsive environmental design impacting various communities. In particular, which affects the currently 4.3 billion Asian

communities worldwide - about 60% of the world population. Special focus shall be upon the wellbeing of those Asian communities, with a high growth rate, living in both the Asian and non-Asian countries., which involves the following environments (though not exhaustive):-

Children's Environment; Commercial/Retail/Services Environment; Communication Environment; Community Environment / Social Psychology; Construction Environment; Disabled / Inclusive Environment; Educational / Learning Environment; Elderly Environment; General Psychology; Healing / Healthcare Environment; Hospitality / Tourism Environment; Landscaping Environment; Legal Matters; Leisure / Recreational / Sports Environment; Local Cultural / Heritage Environment (Food included); Natural Environment; Residential Environment; Rural Environment / Rural Psychology; Technology-related Environment; Transportation / Travelling Environment; Urban Environment / Urban Psychology; Workplace Environment; etc.

## Table of Contents

Foreword	iii
About the Conference	iv
Table of Contents	vii

No.	Abs Ref	Title	
		<b>Children / Youth Environment</b>	<b>1</b>
A 01	CYE 001	<b>Approaches of Improving Food Allergy Knowledge: Children with food allergy's quality of life</b> Norrina Din, Basri Rashid, Kamal Izzuwan Ramli, Che Noriah Othman <i>1 Foodservice Management, Faculty of Hotel &amp; Tourism, Universiti Teknologi MARA, Malaysia. 2&amp;3 School of Tourism, Hospitality and Environment, Universiti Utara Malaysia. 4Faculty of Pharmacy, Universiti Teknologi MARA, Malaysia</i> norrina.din@ppinang.uitm.edu.my	<b>3</b>
A 02	CYE 002	<b>Impact of Mosque Planning on Children's Mobility and Attendance</b> Jamilia Mohd Marsin 1* Syed Iskandar Ariffin2, Raja Nafida Raja Shahminan 3, <i>1 Faculty of Built Environment, Universiti Teknologi Malaysia 2Institut Sultan Iskandar (ISI), Universiti Teknologi Malaysia, 3 Centre for the Study of Built Environment in the Malay World (Kalam), Universiti Teknologi Malaysia</i> marsin.j@gmail.com	<b>5</b>



- A 03      C YE      **Parental Feeding Attitude, Style and Environment**      7  
007      **Factor Influence on Body Mass Index (BMI)**  
**among Overweight and Obese School Children**  
Roswati Nordin\*, Norimah Said, Fatin Faridah  
Nordin, Nurul Farhana Adnan  
*Nursing Department, Faculty of Health Sciences,*  
*Universiti Teknologi MARA, Malaysia*  
roswati2809@puncakalam.uitm.edu.my
- A 04      C YE      **Parents' Perceptions on Factors Influences the**      9  
003      **Level of Physical Activity among Overweight and**  
**Obese Children**  
Kartini Ilias1\* Nurfarahain Johari2, Siti Sabariah2  
*1 Department of Basic Sciences, Faculty of Health*  
*Sciences, Universiti Teknologi MARA, 42300,*  
*Puncak Alam, Selangor, Malaysia. 2 Centre of*  
*Nutrition and Dietetics. Faculty of Health Sciences,*  
*Universiti Teknologi MARA, 42300, Puncak*  
*Alam, Selangor, Malaysia*  
kartini\_iliast@puncakalam.uitm.edu.my
- A 05      C YE      **Relevance of Independent Mobility to achieving a**      11  
004      **Sustainable Child-friendly Environment in**  
**Military Barracks: A Review**  
Daodu Tosin<sup>1</sup>, Ismail Said<sup>2</sup>  
*<sup>1</sup>PhD Candidate, <sup>2</sup>Associate Professor, Faculty of*  
*Built Environment, Universiti Teknologi Malaysia*  
*81310 Skudai Johor, Malaysia.*  
daodutosin1@gmail.com
- A 06      C YE      **Reviewing the Existing Dyslexia Intervention**      13  
005      **Framework in Formulating Environmental-Based**  
**Design Framework for Dyslexia Learning**  
**Environment**  
Rushdina Izhama<sup>1</sup>, Nurllelawati Ab. Jaliil<sup>2</sup>, Zaiton Abdul  
Rahim<sup>3</sup>  
*1Department of Applied Arts and Design,*  
*2Department of Applied Arts and Design,*  
*3Department of Architecture, Kulliyah of*

Architecture and Environmental Design, International  
Islamic University, Malaysia  
Rushdina93@gmail.com

A 07	CYE 006	<b>Youth in Vertical Housing Neighbourhood Space: A focus group discussion</b> Kamarul Ariff Omar <sup>1*</sup> , Dasimah Omar <sup>1</sup> , Saberi Othman <sup>2</sup> , Zaharah Mohd Yusoff <sup>1</sup> <sup>1</sup> Faculty of Architecture, Planning and Surveying, University of Teknologi MARA (UiTM), 40450 Shah Alam, Selangor, Malaysia. <sup>2</sup> Faculty of Science and Mathematics, Universiti Pendidikan Sultan Idris (UPS), 35900 Tanjong Malim, Perak Malaysia kamarulariffomar@gmail.com	15
<b>Commercial / Retail / Services Environment</b>			<b>17</b>
A 08	CRSE 001	<b>Influence of Theme Restaurant Atmospheric Factors Towards Customers' Revisit Intention</b> Wan Nazriah Wan Nawawi*, Wan Nor Bayah Wan Kamarudin, Amanina Mat Ghani, Aina Mawaddah Adnan Faculty of Hotel and Tourism Management, Universiti Teknologi MARA (Terengganu) Terengganu, Malaysia Wanna035@tganu.uitm.edu.my	19
A 09	CRSE 002	<b>Perception Factors Affecting Buying Decisions</b> Graipop Pasirom Multidisciplinary Design Research Program, Faculty of Architecture, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand Hobbits70@gmail.com	21
<b>Communication / Social Media Environment</b>			<b>23</b>
A 10	CSME 002	<b>Survey on Facility Managers Perception through Instant Message via WhatsApp Application</b>	25

Nor Diana Aziz\*, Abdul Hadi Nawawi, Nor Rima  
Muhamad Ariff  
Centre of Postgraduate Studies, Faculty of  
Architecture, Planning and Surveying, Universiti  
Teknologi MARA (UiTM) Shah Alam, 40450  
Malaysia  
nordiana.aziz@gmail.com

**Community Environment / Social Psychology** **27**

- |      |             |   |           |
|------|-------------|---|-----------|
| A 11 | ComE<br>001 | <b>Between Survival and Sustenance: Plants Selection for Community Recycle Edible Garden</b><br>Nur Huzeima Mohd Hussain*, Atikah Fukaihah Amir, Norizan Mt Akhir, Khairul Adham Ibrahim<br><i>Department of Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA Cawangan Perak, Malaysia</i><br>nurhu154@perak.uitm.edu.my  | <b>29</b> |
| A 12 | ComE<br>002 | <b>Green Mosque: A living nexus</b><br>Siti Syamimi Omar*, Nur Hanim Ilias, Ruwaidah Borhan, Atikah Fukaihah Amir<br><i>Department of Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA Cawangan Perak, Malaysia</i><br>sitisyamimi@perak.uitm.edu.my  | <b>31</b> |
| A 13 | ComE<br>003 | <b>Impacts of Resettlements on Orang Asli Community</b><br>Jamalunlaili Abdullah* <sup>1</sup> , Siti Aisyah Abd Samat <sup>2</sup> , Che Bon Ahmad <sup>3</sup><br><i>1, 2Centre of Studies for Town and Regional Planning, 3Centre of Studies for Park and Amenity Management, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA 40450 Shah Alam, Selangor</i><br>jamal858@salam.uitm.edu.my | <b>33</b> |

A 14	ComE 004	<b>Improving Community Quality of Life through Recycle Edible Garden</b> Nur Hanim Ilias *, Nur Huzeima Mohd Hussain, Siti Syamimi Omar, Azran Mansor <i>Department of Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA Cawangan Perak, Malaysia</i> <i>nurha048@perak.uitm.edu.my</i>	35
A 15	ComE 006	<b>Localized Innovation of Knowledge Community: Creation of local knowledge and learning landscape</b> Hui Chin Huang <sup>1</sup> , Shenglin Elijah Chang <sup>2</sup> <i>1 Ph.D. Candidate, Graduate Institute of Building and Planning, National Taiwan University, Lecturer, Chien Hsin University of Science and Technology. 2 Professor, Graduate Institute of Building and Planning, National Taiwan University</i> <i>heidiime@gmail.com</i>	37
A 16	ComE 007	<b>Public Library as a Social Interactive Space</b> Wan Hashimah Wan Ismail*, Lily Ting Shu Chi <i>Architecture Department, Faculty of Built Environment, Universiti Teknologi Malaysia, Malaysia</i> <i>wan7137shima@gmail.com</i>	39
A 17	ComE 008	<b>The Role of Good Waqf Governance in Achieving Sustainable Development</b> Saripah Abdul Latif <sup>1*</sup> , Nik Muniyati Nik Din <sup>2</sup> and Zaiton Mustapha <sup>3</sup> <i><sup>1</sup>Faculty of Business and Management, <sup>2</sup>Academy of Contemporary Islamic Studies, <sup>3</sup>Academy of Language Studies, Universiti Teknologi MARA Kelantan, Kota Bahru Campus, Malaysia</i> <i>saripah@kelantan.uitm.edu.my</i>	41
A 18	ComE 009	<b>Social Designing Edible Community Networks</b> Chen Ting Wu	43

Department of Cultural and Creative Industries,  
HungKuang University, Taichung, Taiwan  
jameswu182@hotmail.com

**Construction Environment** **45**

- A 19 CoE  
001 **Evaluating the Impacts of Design Errors in Construction Project** **47**  
Nurul Huda Muhamad\*, Mohammad Fadhil  
Mohammad  
*Faculty of Architecture, Planning & Surveying, ,  
Universiti Teknologi MARA, Seri Iskandar Campus,  
Seri Iskandar, 32610, Perak, Malaysia  
nurul885@perak.uitm.edu.my*

- A 20 CoE  
002 **Introducing Kaizen method for Process Improvement towards the Intention of BIM Adoption by Facility Managers** **49**  
Nor Diana Aziz\*, Nor Rima Muhamad Ariff, Abdul Hadi Nawawi  
*Centre of Postgraduate Studies, Faculty of  
Architecture, Planning and Surveying, Universiti  
Teknologi MARA (UiTM) Shah Alam, 40450  
Malaysia  
nordiana.aziz@gmail.com*

**Educational / Learning Environment** **51**

- A 21 ELE  
001 **Collaboration in Conceptual Architectural Design: The Differentiated Functions of Sketch and Digital Modalities** **53**  
Danfulani Babangida Idi 1\*, Khairul Anwar Mohamed Khaidzir 2  
*1Department of Architecture, Faculty of the Built  
Environment, Universiti Teknologi Malaysia,  
Malaysia., 2Department of Architecture, Faculty of  
the Built Environment, Universiti Teknologi Malaysia,  
Malaysia.  
babangida2010@gmail.com*

A 22	ELE 002	<b>Discovering Students Expectation in Outdoor Learning Environment</b> Noralizawati Mohamed <sup>1</sup> , Noriah Othman <sup>2</sup> <i><sup>1,2</sup>Centre of Studies for Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, 42300 Puncak Alam, Selangor, Malaysia</i> <i>leezmohd@yahoo.com</i>	55
A 23	ELE 003	<b>The Orthorexia Nervosa and Quality of Life among Health Sciences Students</b> Mohd Ramadan Ab Hamid <sup>1*</sup> , Nurfarhah Najwa Azman <sup>1</sup> , Norimah Said <sup>2</sup> , Aiman Nadia Akmar Rahman <sup>3</sup> <i><sup>1</sup>Centre of Nutrition and Dietetics, Faculty of Health Sciences, Universiti Teknologi Mara, 42300 Bandar Baru Puncak Alam Selangor, Malaysia. <sup>2</sup>Centre of Nursing, Faculty of Health Sciences, Universiti Teknologi Mara, 42300 Bandar Baru Puncak Alam Selangor, Malaysia. <sup>3</sup>Centre of Physiotherapy Faculty of Health Sciences, Universiti Teknologi Mara, 42300 Bandar Baru Puncak Alam Selangor, Malaysia</i> <i>ramadan7230@puncakalam.uitm.edu.my</i>	57
A 24	ELE 005	<b>Profiling the Existing Interior Learning Environment of Tahfiz Centre in Identifying Environmental Engaging Framework</b> Nur Atiqah Jamaludin <sup>1</sup> , Nurlaelawati Ab. Jalil <sup>1</sup> , Arita Hanim <sup>2</sup> <i><sup>1</sup> Department of Applied Arts and Design &amp; Kulliyah of Architecture and Environmental Design, <sup>2</sup> Department of Architecture &amp; Kulliyah of Architecture and Environmental Design, International Islamic University Malaysia, Malaysia</i> <i>eykadean@gmail.com</i>	59
A 25	ELE 004	<b>Weight Reduction among Overweight and Obese Students in Higher Learning Institutions</b>	61

Ajau Danis<sup>1</sup>, Sarah Hairudin<sup>2</sup>, Mohd Suleiman Murad<sup>3</sup>, Khairil Anuar Md Isa<sup>1</sup>  
*1Basic Science Department, Faculty of Health Sciences, Universiti Teknologi MARA Cawangan Selangor, 2Nutrition and Dietetic Department, Faculty of Health Sciences, Universiti Teknologi MARA Cawangan Selangor , 3Occupational Therapy Department, Faculty of Health Sciences, Universiti Teknologi MARA Cawangan Selangor*  
ajaudanis@puncakalam.uitm.edu.my

**General Psychology** **63**

- A 26      GP 001      **A Systematic Review on Determinants of Subjective Well-Being** **65**  
Nurul Hafizah Azizan\*, Zamalia Mahmud  
*Statistics Department, Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA, Malaysia*  
hafizahaz@kelantan.uitm.edu.my

**Health / Healing Environment** **67**

- A 27      HE 001      **A Review of Sensory Design Physical Learning Environment for Autism Centre** **69**  
Roslinda Ghazali, Siti Rasidah Md Sakip  
Department of Post-graduate, Universiti Teknologi MARA, Kampus Seri Iskandar, Perak, Malaysia  
lindakeruuing@gmail.com
- A 28      HE 002      **Breastfeeding Knowledge, Attitude, Prior Exposure, and Intention to Breastfeed among Undergraduate University Students** **71**  
Syahrul Bariah Abdul Hamid, Nabilah Yahya  
*Centre of Nutrition & Dietetics, Faculty of Health Sciences, Universiti Teknologi MARA Selangor, Puncak Alam Campus, 42300 Puncak Alam, Selangor, Malaysia*  
syahrulbariah@puncakalam.uitm.edu.my

- A 29 HE 003 **HIV Knowledge, Attitude and Perception among University Students** 73  
Norimah Said<sup>1</sup>, Mohd Ramadan Ab Hamid<sup>2</sup> Laily Azmira Tarmizi<sup>1</sup>, Nor Afifah Azizan<sup>1</sup>  
<sup>1</sup>Centre of Nursing , Faculty Health Sciences, Universiti Teknologi MARA Selangor, Malaysia.  
<sup>2</sup>Centre of Nutrition and Dietetics, Universiti Teknologi MARA Selangor, Malaysia  
norimah2809@puncakalam.uitm.edu.my
- A 30 HE 004 **Internationalisation of Hospitals in the Wake of Green Agenda: How much more to be done?** 75  
Nuraisyah Chua Abdullah<sup>1</sup>, Herwina Rosnan<sup>2</sup>, Norzayana Yusof<sup>3</sup>  
<sup>1</sup>Faculty of Law, Universiti Teknologi MARA (UiTM), 40450 Shah Alam, Selangor, Malaysia <sup>2</sup>Arshad Ayub Graduate Business School, Universiti Teknologi MARA, 40450, Shah Alam, Selangor, Malaysia.  
<sup>3</sup>Faculty of Business and Management, Universiti Teknologi MARA, 40450, Shah Alam, Selangor, Malaysia  
nuraisyahc@yahoo.com,  
nuraisyah@salam.uitm.edu.my
- A 31 HE 005 **Perceived Barriers in Physical Activity Among University Students** 77  
Theresa Ahing 1, Nur Afifah Hamjah 1, Cyndra Robert Budull 1, Nur-Hasanah Ruslan 2  
1 Faculty of Sports Science and Recreation, Universiti Teknologi MARA, Cawangan Sarawak, Malaysia. 2 Faculty of Sport Science and Recreation, Universiti Teknologi MARA, Cawangan Pahang, Jengka, Pahang, Malaysia  
theresaahing@sarawak.uitm.edu.my
- A 32 HE 006 **Perception Pharmacy Staff About CAM in Malaysian Government Hospital** 79  
Che Noriah Othman, 2. Maryam Farooqui and 3. Norrina Din



1 Faculty of Pharmacy, UiTM Pulau Pinang, Bertam Campus, 13200, Kepala Batas, Penang, Malaysia.,  
2. Department of Pharmacy Practice, Unaizah College of Pharmacy, Qassim University, Unaizah, Qassim, Saudi Arabia.3Department, Faculty, 3. University, 3. Faculty of Hotel Managemnet , UiTM Pulau pinang, 13500, Permatang Pauh, Penang, Malaysia.  
chenoriah.othman@ppinang.uitm.edu.my

- |      |        |  |    |
|------|--------|--|----|
| A 33 | HE 007 | <b>Psychological Influence towards Health Consumers Intention to use Malaysia-Web based Health Information Service</b><br>Siti Noraini M. Tobi <sup>1*</sup> , Maslin Masrom <sup>2</sup> , Erne Suzila Kassim <sup>3</sup> , Yap Bee Wah <sup>4</sup><br><i>1Faculty of Business and Management, Universiti Teknologi MARA, Puncak Alam, Malaysia. 2Razak School of Engineering and Advanced Technology , Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia 3Faculty of Business and Management, Universiti Teknologi MARA, Puncak Alam, Malaysia. 4Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA, Shah Alam, Malaysia snoraini7601@puncakalam.uitm.edu.my</i> | 81 |
|------|--------|--|----|

## Hospitality / Tourism Environment 83

- |      |         |  |    |
|------|---------|--|----|
| A 34 | HTE 001 | <b>An Integrated Tourism Model based on Local Identity for Ecological, Historical, and Cultural Tourism</b><br>Natapon Anusorntharangkul <sup>1*</sup> , Yanin Rugwongwan <sup>2</sup><br><i>1* Arch D. Student, Multidisciplinary Design Research Program, 2 Asst. Prof., Ph.D., Faculty of Architecture, King Mongkut's Institute of Technology Ladkrabang (KMITL) 10520, Thailand natapon15@hotmail.com</i> | 85 |
| A 35 | HTE 003 | <b>Guidelines for Antarctic Tourism: An evaluation</b><br>Nuraisyah Chua Abdullah <sup>1</sup> , Rohani Mohd Shah  | 87 |

Faculty of Law, Universiti Teknologi MARA (UiTM),  
40450 Shah Alam, Selangor, Malaysia  
nuraisyahc@yahoo.com,  
nuraisyah@salam.uitm.edu.my

- A 36      HTE  
004      **Packaging Development for Promoting Dam Tourism Community**      89  
Sarath Simsiri <sup>1\*</sup>, Ratananaphadol Smitinand <sup>2</sup>, Mana Eiamhua <sup>3</sup>  
*1 Ph.D. candidate, 2 Lecturer., 3 Asst. Prof., School of Tourism and Hospitality, Suan Dusit University, Thailand*  
sarath308@hotmail.com
- A 37      HTE  
005      **States' Wildlife Tourism Policy Prepares Tourists for Sustainability of Antarctica Tourism?**      91  
Nuraisyah Chua Abdullah\*, Rohani Mohd Shah  
*Faculty of Law, Universiti Teknologi MARA (UiTM), 40450 Shah Alam, Selangor, Malaysia*  
nuraisyahc@yahoo.com,  
nuraisyah@salam.uitm.edu.my

**Landscaping Environment**      93

- A 38      LaE  
001      **Boosting Quality of Life through Tree Care: Addressing Tree Vandalism in Urban Setting**      95  
Helmi Hamzah <sup>1\*</sup>, Noriah Othman <sup>2</sup>, Nur Huzeima Mohd Hussain <sup>3</sup>  
*1,3 Department of Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA Cawangan Perak, Malaysia, 2 Centre of Studies for Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA Kampus Puncak Alam, Malaysia*  
helmi692@perak.uitm.edu.my

- |      |            |  |     |
|------|------------|--|-----|
| A 39 | LaE<br>002 | <b>Choosing Tree for Urban Fabric: Role of landscape architect</b><br>Ramly Hasan <sup>1*</sup> , Noriah Othman <sup>2</sup> , Faridah Ismail <sup>3</sup><br><i>1Post Graduate Studies, 2 Centre of Studies for Landscape Architecture, 3 Centre of Postgraduate Studies, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, 40450 Shah Alam, Selangor</i><br><i>ramlyhasan80@yahoo.com</i>  | 97  |
| A 40 | LaE<br>003 | <b>The Components of Social Dimension for Community Gardens in Residential Areas</b><br>Shafa Marzidah Abdullah Ayeop <sup>1</sup> , Halmi Zainol <sup>2</sup> , Nur Huzeima Mohd Hussain <sup>3</sup><br><i>1 Centre of Postgraduate Studies, 2 Department of Town and Regional Planning, 3 Department of Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Seri Iskandar Campus, Seri Iskandar, 32610, Perak, Malaysia.</i><br><i>shafaayeop@gmail.com</i> | 99  |
| A 41 | LaE<br>004 | <b>Theoretical Framework for Trees Management in Landscape Design</b><br>Ramly Hasan <sup>1*</sup> , Nor Diana Aziz <sup>2</sup> , Abdul Hadi Nawawi <sup>3</sup> , Ghazali Mohd Amin <sup>4</sup><br><i><sup>1,2</sup> Post Graduate Studies, <sup>3</sup> Centre of Postgraduate Studies, <sup>4</sup> Centre of Building Surveying Studies, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, 40450 Shah Alam, Selangor</i><br><i>ramlyhasan80@yahoo.com</i>                      | 101 |
| A 42 | LaE<br>005 | <b>Vegetation Design as User's Thermal Modifier at Urban Park</b><br>Sharifah Khalizah Syed Othman Thani <sup>1*</sup> , Nor Hanisah Mohd Hashim <sup>2</sup> , Nik Hanita Nik Mohamad <sup>3</sup> , Syed Abdul Mutalib Al Junid Syed Abdul Rahman <sup>4</sup>   | 103 |

<sup>1,3</sup> Centre of Studies for Landscape Architecture,  
Faculty of Architecture, Planning and Surveying,  
42300 Universiti Teknologi MARA, Kampus Puncak  
Alam, Bandar Puncak Alam, Selangor, Malaysia. <sup>2</sup>  
Centre of Studies for Park and Amenities  
Management, Faculty of Architecture, Planning and  
Surveying,. <sup>4</sup> Centre of Studies for Electrical &  
Electronic Engineering, Faculty of Electrical  
Engineering, Universiti Teknologi MARA, 40450  
Shah Alam, Selangor, Malaysia  
khalizah81@gmail.com

	<b>Legal Matters</b>		<b>105</b>
A 43	LM 001	<b>Law and Policy Interventions to Advance the Community's Quality of Life</b> Rohani Mohd Shah*, Rohani Mohd Shah <sup>1*</sup> , Rohazar Wati Zuallcobley <sup>1</sup> , Ahmad Ismail Illman Razali <sup>2</sup> <i>1Faculty of law, Universiti Teknologi MARA, Malaysia. 2Malaysia Competition Commission (MyCC), Malaysia rohanimohdshah@salam.uitm.edu.my</i>	<b>107</b>
A 44	LM 002	<b>Role of Legislation in Sustaining Environment Change and Creating a Better Quality of Life for Global Community</b> Rohani Mohd Shah <sup>1*</sup> , Nur Aisyah Chua Abdullah <sup>1</sup> , Hamisah Abd. Rahman <sup>2</sup> , Zaliha Husin <sup>43</sup> <i>1Faculty of Law, 2Faculty of Business Management, 3Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA, Malaysia rohanimohdshah@salam.uitm.edu.my</i>	<b>109</b>
A 45	LM 003	<b>Science Diplomacy Transcend National Boundaries to Promote Greater Global Peace, Prosperity and Stability</b> Rohani Mohd Shah*, Nuraisyah Chua Abdullah <i>1Faculty of Law, 2Faculty of Business Management, 3Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA, Malaysia</i>	<b>111</b>

rohanimohdshah@salam.uitm.edu.my

<b>Local Heritage Environment</b>		<b>113</b>	
A 46	LHE 001	<b>Ascertaining the Economic Sustainability of Heritage Property Market based on Sales Transaction Analysis</b> Normayuni Mat Zin*, Suriatini Ismail, Fatin Afiqah Md. Azmi <i>Faculty of Architecture and Ekistics, Universiti Malaysia Kelantan, Malaysia</i> mayunimatzin@gmail.com	<b>115</b>
A 47	LHE 003	<b>Confusion in Design and Facilities of Layout Plan (GMP Requirements) Among Industries, Consultants and Authorities</b> Mohd Bakri Jali1*, Maaruf Abdul Ghani2,Norazmir Md Nor3 1SIRIM Training Services, Malaysia. 2School of Food Technology and Chemical Science, Faculty of Science and technology, UKM, Malaysia. 3 Nutrition Departments, Faculty of Health Sciences, UiTM, Malaysia mbakri@sirim.my	<b>117</b>
A 48	LHE 004	<b>Construction Techniques of Traditional Malay Houses</b> Khairul Fikri Khairudin, Nurul Hamiruddin Salleh, Srazali Aripin <i>Department of Architecture, Kulliyyah of Architecture and Environmental Design, International Islamic University Malaysia, Malaysia</i> khairul.fikri.khairudin@gmail.com	<b>119</b>
A 49	LHE 005	<b>Developing an Adaptive Reuse Model for Organization Management in Conservation of Heritage Building</b>	<b>121</b>

Mohd Hanizun Hanafi\*, Mohd Umzarulazijo Umar,  
Arman Abdul Razak, **Zul Zakiyudin A.Rashid**  
School of Housing, Building and Planning. University  
Science Malaysia, Malaysia  
hanizun@usm.my

- |      |            |   |     |
|------|------------|---|-----|
| A 50 | LHE<br>006 | <b>A review on Decision-making Models and Tools in Developed Countries towards Enhancing Sustainable Built Heritage Assets in Developing Countries</b><br>Salim Bashir Umar, Ismail Said<br><i>Department of Landscape Architecture, Faculty of Built Environment, Universiti Teknologi Malaysia, Malaysia</i><br>Sbumar81@gmail.com  | 123 |
| A 51 | LHE<br>007 | <b>Improving Thermal Comfort through the Choice of Available Building Materials in the Tropical Region of Nigerian: A Review</b><br>Abdulkarim Kabiru Haruna1*, Ismail Saaid2<br><i>1 Department of Architecture, Faculty of Built Environment, Universiti Teknologi Malaysia, Johor Bahru Malaysia, 2 Department of Landscape Architecture, Faculty of Built Environment, Universiti Teknologi Malaysia, Johor Bahru Malaysia</i><br>kabir2yk@yahoo.com  | 125 |
| A 52 | LHE<br>008 | <b>Preserving the Characteristics of Urban Heritage</b><br>Noor Aimran Samsudin1*, Muhamad Solehin Fitry Rosley2, Raja Nafida Raja Shahminan3, Sapura Mohamad4<br><i>1 Senior Lecturer, Department of Urban and Regional Planning, Faculty of Built Environment, Universiti Teknologi Malaysia, Malaysia. 2 PhD Candidates, Landscape Department, Faculty of Social Sciences, the University of Sheffield, United Kingdom. 3 Director, Centre for the Study of Built Environment in the Malay World (KALAM), 4 Senior Lecturer, Department of Landscape Architecture,</i> | 127 |

Faculty of Built Environment, Universiti Teknologi  
Malaysia, Malaysia  
nooraimran@utm.my

- A 53      LHE      **Urban Public Space Revitalisation Strategies**      129  
009  
Dasimah Omar 1\*, Maimunah Ramlee 2, Rozyah  
Mohd Yunus 3, Zalina Samadi 4  
*1Centre of Studies for Town and Regional Planning,  
Faculty of Architecture, Planning & Surveying,  
Universiti Teknologi MARA Kampus Puncak Alam,  
Selangor, Malaysia, 2Centre of Studies for  
Postgraduate Studies, Faculty of Architecture,  
Planning and Surveying, Universiti Teknologi MARA  
Shah Alam, Malaysia,, 3Centre of Studies for  
Architecture, Faculty of Architecture, Planning &  
Surveying, Universiti Teknologi MARA Kampus  
Puncak Alam, Selangor, Malaysia, 4Centre of  
Studies for Architecture, Faculty of Architecture,  
Planning & Surveying, Universiti Teknologi MARA  
Kampus Puncak Alam, Selangor, Malaysia  
dasimaho@yahoo.com*

**Leisure / Recreational / Sports Environment**      131

- A 54      LRSE      **Funding for Effective Maintenance Management**      133  
001      **of Public Sport Facility**  
Nurfazana Mohd Al Hapiz 1, Hasnul Faizal Hushin  
Amri 1, Nor Diana Aziz 2, Siti Aishah Wahab 1  
*1Faculty of Sports Science and Recreation, 2Centre  
of Postgraduate Studies, Faculty of Architecture,  
Planning and Surveying, Universiti Teknologi MARA  
(UiTM) Shah Alam, Malaysia  
nfnmah@gmail.com*
- A 55      LRSE      **Nutritional Supplements Consumption among**      135  
002      **Athletes**  
Nurul Nadhirah Abd Rahman1, Siti Sabariah Buhari1  
*Centre of Nutrition & Dietetics, Faculty of Health  
Sciences, Universiti Teknologi MARA Selangor,*

Puncak Alam Campus, 42300 Puncak Alam,  
Selangor, Malaysia.  
sabariah6204@puncakalam.uitm.edu.my

<b>Residential Environment</b>		<b>137</b>	
A 56	RE 001	<b>House Qualities Characteristics Relationship on House Prices</b> Muhamad Hilmi Mohamad @ Masri <sup>1*</sup> , Abdul Hadi Nawawi <sup>1</sup> , Edie Ezwan Mohd Safian <sup>2</sup> , Ahmad Fawwaz Ahmad Saleh <sup>1</sup> <i><sup>1</sup>Department of Postgraduate Studies, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA (UiTM), 40450 Shah Alam, Selangor, Malaysia . <sup>2</sup>Universiti Tun Hussein Onn Malaysia, 86400 Batu Pahat, Johor, Malaysia</i> hilmimasri@gmail.com	<b>139</b>
A 57	RE 002	<b>Neighborhood Factors Contributing to the Household Mobility</b> Mohd Hanizun Hanafi <sup>*</sup> , Afrina Shaheera Mazree, Mohd Umzarulazijo Umar, Hakimi Ahmad <i>School of Housing, Building and Planning. University Science Malaysia, Malaysia</i> hanizun@usm.my	<b>141</b>
<b>Travel / Transportation Environment</b>		<b>143</b>	
A 58	TTE 001	<b>Cognitive Impairment among Young Motorcyclists: A controlled study</b> Anila Ali <sup>1,3</sup> , Roslinah Mohamad Hussain <sup>2</sup> <i><sup>1</sup>Department of Environmental Health and Safety, Faculty of Health Sciences, Universiti Teknologi MARA, Puncak Alam Campus, Selangor Malaysia, <sup>2</sup>Department of Medical Laboratory Technology, Faculty of Health Sciences, Universiti Teknologi</i>	<b>145</b>



MARA, Puncak Alam Campus, Selangor Malaysia,  
<sup>3</sup>Department of Environmental Management and  
Policy, Faculty of Engineering, Balochistan  
University of Information Technology, Engineering  
and Management Sciences, Quetta, Pakistan  
anila928@yahoo.com

- A 59      TTE  
002      **Conceptual Framework of Built Environment and  
Social-Factors on Cycling Behavior among  
Residential Neighborhoods**      147  
Norhazlan Haron<sup>1</sup>, Halmi Zainol, Wan Rabiah Wan  
Omar  
*Department of Town and Regional Planning, Faculty  
of Architecture, Planning and Surveying, Universiti  
Teknologi MARA, Perak Branch, Malaysia  
hazlan100@gmail.com*
- A 60      TTE  
003      **Urban Pedestrians and Outdoor Thermal Comfort  
Studies: Meta-Analysis**      149  
Mei Yee Teoh\*, Ismail Said, Yoke Lai Lee  
*Department of Landscape Architecture, Faculty of  
Built Environment, Universiti Teknologi Malaysia,  
Malaysia  
quare0409@gmail.com*

**Urban Environment**      151

- A 61      UE 001      **Interstitial Urbanism: Typologies and potential as  
urban space reconnector**      153  
Raziah Ahmad, Mohamed Ikhwan Nasir Mohamed  
Anuar  
*Centre of Studies for Landscape Architecture,  
Faculty of Architecture, Planning and Surveying,  
Universiti Teknologi MARA, Puncak Alam Campus,  
Bandar Puncak Alam, 42300, Malaysia  
raziyah85@gmail.com*

- |      |        |  |     |
|------|--------|--|-----|
| A 62 | UE 002 | <b>Rethinking Urban Public Space: Physical and Functional Analysis through Visual Surveys</b><br>Norhafizah Abdul Rahman*, Izham Ghani, Mohd Zulhaili Teh, Khairul Adham Ibrahim<br><i>Faculty of Architecture, Planning &amp; Surveying, Universiti Teknologi MARA, Malaysia</i><br>norha776@perak.uitm.edu.my  | 155 |
| A 63 | UE 006 | <b>A Review of the Parametric Characteristics of Urban Environment and it's influence to the Urban Quality of Life</b><br>Muhammad Abu Eusuf <sup>1*</sup> , Muhammad Saadmann RSE <sup>2</sup> , Muhammad Mehubub RSE <sup>3</sup> , Mansor Ibrahim <sup>4</sup><br><i>1Department of Civil Engineering, Faculty of Engineering, International Islamic University Malaysia (IIUM), Malaysia, 2, 4Department of Urban and Regional Planning, Faculty of Architecture and Environmental Design, IIUM, Malaysia, 3Department of Mechanical and Mechatronics Engineering, University of Technology Sydney,</i><br>eusuf2005@gmail.com | 157 |
| A 64 | UE 003 | <b>The Rise of Rooftop Urban Farming</b><br>Nur Hayati Hashim, Nur Huzeima Mohd Hussain, Asmat Ismail<br><i>Faculty of Architecture, Planning &amp; Surveying, Universiti Tecknologi MARA Perak, Malaysia.</i><br>nurhayatie.hashim@gmail.com  | 159 |
| A 65 | UE 004 | <b>Street Realms: Reviewing the unique characteristics of Jalan Tuanku Abdul Rahman, Kuala Lumpur</b><br>Zainuddin Ab Rahman*, Sharifah Khalizah Syed Othman Thani, Rafiuddin Roslan<br><i>Centre of Study for Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Cawangan Selangor, Kampus Puncak Alam, 42300 Bandar Puncak Alam, Selangor Darul Ehsan, Malaysia</i>   | 161 |

dinz182@gmail.com

A 66	UE 005	<b>Thermal Performance of a High-Rise Residential Building with Internal Courtyard in Tropical Climate</b> Lobna Hassan Elgheriani*, Parid Wardi Bin Sudin, AbdulBasit Ali Almhafdy <i>Faculty of Architecture and the Built Environment, Limkokwing University of Creative Technology, Malaysia</i> <i>Lobna.arch@gmail.com</i>	163
A 67	UE 007	<b>Wind-Induced Ventilation Techniques for Passive Cooling</b> Ahmad Ridzwan Othman, Fatin Farhah Muda <i>Centre of Studies for Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi Mara, Malaysia</i> <i>dwan_arc7@yahoo.com</i>	165
<b>Authors Index</b>			167

# **Children / Youth Environment**

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

**A 01**  
CYE 001

## **Approaches of Improving Food Allergy Knowledge: Children with food allergy's quality of life**

Norrina Din<sup>1</sup>, Basri Rashid<sup>2</sup>, Kamal Izzuwan Ramli<sup>3</sup>,  
Che Noriah Othman<sup>4</sup>

*<sup>1</sup> Foodservice Management, Faculty of Hotel & Tourism, Universiti Teknologi MARA, Malaysia. <sup>2&3</sup> School of Tourism, Hospitality and Environment, Universiti Utara Malaysia. <sup>4</sup>Faculty of Pharmacy, Universiti Teknologi MARA, Malaysia*

norrina.din@ppinang.uitm.edu.my

The food allergy commonly affected many people regardless of their age, especially among children. Thus, food allergy considered as one of the global health problems around the globe and the cases worldwide are on the rise. The food allergy developed when the immune system recognized food that can be destructive to the body and mounts a reaction to it. The results can be mild to severe and may be life-threatening. The symptoms developed are various depending on its' severity such as hives, redness around the skin and mouth, vomiting, nasal congestion, and for severe cases, the body may turn to blue, dropping of blood pressure, loss of consciousness, the difficulty of breathing, and swelling lips, tongue and throat. In relations to the severity described, the food allergy sufferers demand high attention especially to the children when the parents send them to the nursery. Their life could be dangerous if they are exposed or wrongly ingested food allergen because it will lead to life-threatening. Therefore, the nursery employees need to take extra precaution when dealing with children with food allergy as compared to ordinary children. On top of that, they require having safe food, clean environment, and good cooperation from the nursery employees since the working parents and

the children rely more on the nursery employees. Also, most of the allergic reaction commonly occurred at a childcare center. Due to that, this paper warrants to assess the knowledge of the person handling the food allergy sufferers. Furthermore, the determination of several approaches is needed to improve their understanding of managing this susceptible population. Out of 600 from the total population, only 297 nursery employees participated in an online survey. Results showed the majority of nursery employees (84%, n=250) have at least basic knowledge about food allergy. Among all types of approaches, the majority of the nursery employees (31%, n= 93) prefer to have food allergy brochure to increase their knowledge. The suggested point perhaps can improve the nursery employees regarding food allergic safe preparation and management. Based on the demographic profile of the respondents especially among the working culture and community practices, this study selected these approaches.

**Keywords:** Food allergy, children, nursery employees, knowledge

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.*

**A 02**  
**CYE 002**

## **Impact of Mosque Planning on Children's Mobility and Attendance**

Jamalia Mohd Marsin <sup>1\*</sup> Syed Iskandar Ariffin<sup>2</sup>,  
Raja Nafida Raja Shahminan <sup>3</sup>

*<sup>1</sup> Faculty of Built Environment, Universiti Teknologi Malaysia <sup>2</sup>Institut Sultan Iskandar (ISI), Universiti Teknologi Malaysia, <sup>3</sup> Centre for the Study of Built Environment in the Malay World (Kalam), Universiti Teknologi Malaysia*

marsin.j@gmail.com

It is important for Muslim children to go to the mosque. Mosque is a place where children could develop their identity through learning, practising and socializing. It is assumed that children could increase their affordance in going to the mosque if they have independent mobility. Independent mobility was operationalized as 'license' to move around independently in the environment. Thus, the nature of urban structure can affect children's mode of travelling to masjid. However, our built environment is often designed for the 'normal' adults. In Malaysia, we could see urban development is inclined toward vehicle population. Children who are mostly pedestrian and non-motorized vehicle users are less considered in urban planning or design. This research would investigate the impact of mosque planning on children's mobility and attendance. The objectives for this study are (1) To identify children's mode of travel to the mosque, (2) to investigate the frequency of attendance to the mosque by children, (3) to investigate the urban structures that linked to children's mobility in going to the mosque. Mixed method is used in this research, combining quantitative approach (behaviour mapping) and qualitative approach (open ended questionnaire). Respondents are teenagers with age range



of 9 to 18 years old. For this study, four (4) case studies mosques are chosen. The criteria of case study mosques are 'jamek' mosque, located at urban neighbourhood in Johor Bahru as 'Jumaah' prayer are held there and these type of mosque receive larger attendees. The four mosques can be divided by two locations which are mosques located 'off' the main road (which are Masjid Jamek Tan Sri Ainuddin Wahid, Taman Universiti and Masjid Bandar Dato Onn and mosques located at central area of the neighbourhood, distanced from the main road (namely Masjid Jamek Bandar Baru Uda and Masjid Al-Jawahir, Taman Mutiara Rini. From this study, It is expected to derive characteristic in mosque planning that affect children's mobility in going to mosque. This includes the experience of children travelling to mosque, perception of children of their journey and its connection with children attendance to mosque in different types of locations.

**Keywords:** mosque planning and design, children, built environment, children friendly mosque

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.*

**A 03**  
**CYE 007**

## **Parental Feeding Attitude, Style and Environment Factor Influence on Body Mass Index (BMI) among Overweight and Obese School Children**

Roswati Nordin\*, Norimah Said,  
Fatin Faridah Nordin, Nurul Farhana Adnan

*Nursing Department, Faculty of Health Sciences,  
Universiti Teknologi MARA, Malaysia*

roswati2809@puncakalam.uitm.edu.my

Obesity prevalence in Malaysia shown drastically increase from 15.1% in 2011 to 17.7% in 2015 with the population of Malaysian is 3.1 million. Obesity means situation where excess body fat has accumulated to the extent that health may be adversely affected. This excess body fat also has side effect on psychological well-being. Many factors can leads to overweight and obesity among school children such as secondary lifestyle, attitude, environment factor and more. Parental feeding attitude, style and environment factor can be biggest causes that may influence child body mass index (BMI). Hence, from the previous statement, the objective of this study is to examine the parental feeding attitude, style and environment factor influence on body mass index among overweight and obese school children at one of the primary school in Klang Valley. In this study, a cross-sectional study design was conducted as a method of the study. Parents who have school children with overweight and obese BMI were selected. The researchers used cluster sampling (n=44), and the descriptive analysis was used. The results of the study found that majority of the overweight and obese children because of the negative attitude and poor practice of parents and poor environment. The researcher also found

that parental feeding attitude resulting as the best prediction factor influence on body mass index ( $P=0.039$ ). This result explained 10 percent of the variability in BMI,  $F(1,42)=5.90, p<0.05$ . Lastly, the result shows positive correlation between demographic data (income of parents) with parental feeding attitude ( $r=0.295$ ) ( $p=0.026$ ) and parental feeding environment ( $r=0.293$ ) ( $p=0.027$ ). In conclusion, the study proved that majority of the overweight and obese children because of the negative attitude and poor practice by parents and poor environment surrounding them. Other than that, between all factors, parental feeding attitude was the most prediction factor that influence in child BMI.

**Keywords:** Body Mass Index(BMI); Parental Feeding Attitude; Parental Feeding Style; Environment

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.*

**A 04**  
**CYE 003**

**Parents' Perceptions on Factors Influences the Level  
of Physical Activity among Overweight and Obese  
Children**

Kartini Ilias<sup>1\*</sup>, Nurfarahain Johari<sup>2</sup>, Siti Sabariah<sup>2</sup>

<sup>1</sup> *Department of Basic Sciences, Faculty of Health Sciences, Universiti Teknologi MARA, 42300, Puncak Alam, Selangor, Malaysia.* <sup>2</sup> *Centre of Nutrition and Dietetics, Faculty of Health Sciences, Universiti Teknologi MARA, 42300, Puncak Alam, Selangor, Malaysia*

kartini\_ilias@puncakalam.uitm.edu.my

Among 11 countries in South East Asian, Malaysia was recorded to have highest prevalence of overweight and obesity for children age less than 20 years old with 22.5% and 19.1% in boys and girls respectively. Due to the rapid rise of obesity prevalence many studies have been conducted to identify factors, and consequences of childhood obesity. Childhood obesity profoundly lead to significant negative impacts to the children such as the child will continue to grow into obese adults, and more likely to develop non-communicable disease such as diabetes, heart diseases and many more. There are many contributing factors to obesity such as genetics, dietary behaviors, physical activity and many more. Behaviors related to dietary and physical activity are established early in life and modelled by parents. Thus, it is important and essential to understand how parents may reveal their perceptions and identify how obesity among children happens. Therefore, this study aims to explore parent's perception on the factors such as individual, social and physical environment that influence the physical activity of the overweight and obese children. The aim of the current study was to conduct a qualitative study on parents' perception of

the factors that influencing the physical activity of the overweight and obese children in Putrajaya. The specific objective was to explore the parents' perception, knowledge and attitude on the physical activity of the children. This is a qualitative study which involved 7 parents of children in a primary school of Putrajaya Presint 8(1). The recruitment of participant was using purposive sampling. Interested parents whom respond to the advertisement and flyers were contacted, and screened for participation in the research based on the inclusion criteria. A semi-structured interview was conducted for 30 minutes with parents. The interviews were recorded and transcribed verbatim. Three themes emerged from the analyses of the parents' interview– *“attitudes and knowledge on the physical activity”, “peers pressure”* and *“availability and accessibility of physical activity facilities”*. The sub-themes and categories were further discussed. The findings of the current study imply that the knowledge and awareness of the parents about the factors influence their child overweight and obesity problem could be the beginning steps in making the positive changes and provides opportunities to improve their children physical activities.

Keywords: Obesity, Childhood obesity, Parents perceptions, Physical activity

ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.

A 05  
CYE 004

## **Relevance of Independent Mobility to achieving a Sustainable Child-friendly Environment in Military Barracks: A Review**

Daodu Tosin<sup>1</sup>, Ismail Said<sup>2</sup>

<sup>1</sup>PhD Candidate, <sup>2</sup>Associate Professor, Faculty of Built Environment, Universiti Teknologi Malaysia 81310 Skudai Johor, Malaysia.

daodutosin1@gmail.com

Children's daily lives are made of interrelated parts, unique and inherently spatial. The geographical space of a military camp known as *barracks* can be harnessed by representations like maps, models, and how children can make decisions using such representations by enhancing the concept of independent mobility (IM). The concept of IM means the ability of children to move freely in the barracks neighbourhood without being accompanied by adults. However, it is appalling to note that restricted mobility has affected children access to natural child-friendly environment in military barracks. This could either be attributable to urbanisation, parental fear, dangers from stranger, regimental culture, lack of awareness and other vices. The aim of this research is to assess how the concept of IM can help barracks' children popularly called *barracks boys and girls* in achieving control over their environment through copious literature review on the subject. This would further improve their quality of life. To this extent, 18 books and 32 journal articles on IM of children were reviewed. The findings from IM indicators and characteristics of child-friendly environment reported in selected publications covering 1989-2017 were analysed. Multidisciplinary field approaches including environmental psychology, landscape architecture, urban planning, education, public

health, children sociology, and transportation were employed for creating an improved barracks environment for children. The largest percentages (70%) of the studies have shown that children's level of IM influences their physical, social, cognitive, and emotional developments. Moreover, mobility have been analysed in various studies by measuring indicators like territorial range, geographical distance, time, and licence for children to move around independently in their environment. However, none have given attention to barracks boys and girls in Nigeria context. Additionally, mobility restrictions, social traps as well as other factors of travel modes choice behaviour have also affected children's journey from home to school and other play areas in the barracks. Consequently, the motor and social development of children needed to be examined in barracks residential area towards improved quality of life. Furthermore, ability to play independently outdoors, in the streets and in the yards would be appraised. Subsequently, connection between IM and the ability to recognise and use environment possibilities and activities would be carried out through independent play in the barracks neighbourhood. Finally, the decline in children's IM as a result of urbanisation, parental fear, dangers from stranger, regimental culture, travel mode choices behaviour and other vices reported in many studies would be thoroughly investigated in the military barracks.

**Keywords:** Independent Mobility, Child-friendly Environment, Military Barracks, Social Traps

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.*

**A 06**  
**CYE 005**

## **Reviewing the Existing Dyslexia Intervention Framework in Formulating Environmental-Based Design Framework for Dyslexia Learning Environment**

Rushdina Izham<sup>1</sup>, Nurlelawati Ab. Jalil<sup>2</sup>, Zaiton Abdul Rahim<sup>3</sup>

<sup>1</sup>*Department of Applied Arts and Design,* <sup>2</sup>*Department of Applied Arts and Design,* <sup>3</sup>*Department of Architecture, Kulliyah of Architecture and Environmental Design, International Islamic University, Malaysia*

Rushdina93@gmail.com

In Malaysia, the number of children with dyslexia is increasing every year. As stated by Chan and Fatimah (2012), In the world, 5 to 10 percent of the world populations are dyslexics. In Malaysia alone, 1 out of 20 children are dyslexic where 314,000 students have this learning disability. This issue lead the researcher to cover on this issue and find the solutions by providing an environmental-based design framework for dyslexia learning environment. Generally, Dyslexia affects the academic achievement and academic learning capacity of children. Issues related to dyslexia have led to a recognition of the importance of providing a Dyslexia - friendly environment and improvement in term of formulating environmental-based design framework for dyslexia learning environment. The objectives of this research are to understand the dyslexic behaviour, characteristics and symptoms related to their learning process and environment; to review on existing dyslexia intervention framework at dyslexia learning environment and to formulate environmental-based design framework for dyslexia learning environment. The process of formulating environmental-based design framework for dyslexia need a good understanding about dyslexic children learning capacities. Dyslexic children has their own creative



capacities and it can be shown through their action and daily activities. Those activities and creativities can make up a productive interior learning environment for the assertion and development of innovative approaches. Formulating environmental-based design framework for dyslexia learning environment is a need to awake and allow learning potentials of dyslexic children to grow and develop. This research were conducted by making site observation and a series of interview have been done at several Dyslexic Centres and Schools. A selected case studies on dyslexia learning environment have been made by literature studies and site observation, then a comparison between those case studies have been carried out to produce the framework. The formulated environmental-based design framework is expected to enhance dyslexic learning environment prior to the creativity in teaching to develop the freedom of expression simultaneously creating a positive learning atmosphere.

*Keywords: Dyslexia, Dyslexia intervention framework, Environmental-based design, Dyslexia learning environment.*

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.*

**A 07**  
**CYE 006**

## **Youth in Vertical Housing Neighbourhood Space: A focus group discussion**

Kamarul Ariff Omar<sup>1\*</sup>, Dasimah Omar<sup>1</sup>,  
Saberu Othman<sup>2</sup>, Zaharah Mohd Yusoff<sup>1</sup>

<sup>1</sup> Faculty of Architecture, Planning and Surveying, University of Teknologi MARA (UiTM), 40450 Shah Alam, Selangor, Malaysia. <sup>2</sup> Faculty of Science and Mathematics, Universiti Pendidikan Sultan Idris (UPSI), 35900 Tanjong Malim, Perak Malaysia

kamarulariffomar@gmail.com

There is a degree of agreement as mentioned by scholars, space offers a means for youths to explore and express identity within a transitory period of the life course in which the needs of childhood gradually are renounced without yet having fully been replaced by adult routines and responsibilities. Nevertheless, the details of what and how the activities take place should be theorised and understood are the subject of considerable debate. Youth lived in vertical housing neighbourhood has faced the difficulties on performing leisure activities as the residents misuse the recreational space. Yet, nowadays trend led this young people blend with indoor activities and causing their social interaction value to be rapidly decrease. Indoor activities are much easier to be accomplish since the vertical housing development provide many indoor facilities compared landed housing. Due to this scenario, this study is to identify relative neighbourhood space for better youth social interaction within the vertical housing scheme. The qualitative approach was used for this study as the research design of the present study was exploratory in nature. A focus group discussion was set up in a selected case study area at Lembah

Pantai, with two different group in separate venue and time. The analysis was done by running the content and comparative analysis after transcribing and coding the audio-taped on discussion conversation. The finding shows youth intensively preferring indoor space compare to outdoor space due to space limitation and lost sense of belonging to the neighbourhood space. Furthermore, the residents' committee neglect their appearance in any decision making or given a chair in any meeting with the community resulted youth not to actively participate with the community. This scenario happened in this case study area as the neighbourhood lies with low income group of people. The recommendation suggest to increase youth participation in neighbourhood space by improving interaction between youth and committee member towards a series of community program. The novelty of the study are meant to create better quality of life in vertical housing neighbourhood space especially for youth .

*Keywords:* youth; vertical housing; neighbourhood space; focus group discussion

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.*

# **Commercial / Retail / Services Environment**

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

**A 08**  
**CRSE 001**

## **Influence of Theme Restaurant Atmospheric Factors Towards Customers' Revisit Intention**

**Wan Nazriah Wan Nawawi\*, Wan Nor Bayah Wan Kamarudin-  
Amanina Mat Ghani, Aina Mawaddah Adnan**

*Faculty of Hotel and Tourism Management,  
Universiti Teknologi MARA Terengganu, Malaysia*

Wanna035@tganu.uitm.edu.my

The changing trend and lifestyle today, such as eating outside and 'selfie' phenomena had lead to customers eating out. This was fulfilling their needs to have a meal outside by choosing convenient alternatives. The emergence of plenty restaurants in the country has to lead to foodservice establishment develop new theme restaurants with difference atmosphere in order to compete with each other to follow the trend. Atmospheric factors are one of the crucial parts that management should consider in attracting more customers to come to the restaurant. Therefore, this study was conducted to identify the theme restaurants' atmospheric factors and to determine the most important factor that influences the customers' revisit intention at Kuantan, Pahang. The study also investigates whether the theme restaurants' atmospheric factors significantly influence customers' revisit intention. The researchers distributed of 200 questionnaires had been distributed using the convenience sampling method, however, only 196 questionnaires returned were valid to be analyzed. The data were analyzed using SPSS software through descriptive analysis in order to answer the objective. The Pearson Correlation analysis was used to answer this study's hypothesis. The finding showed that restaurant cleanliness is the most influential factor according to respondent's

monthly income since it has the highest mean value between all. Restaurant environment positively affected customers' revisit intention. Clearly, the results that the researchers have gathered match the concept. All in all, the researchers can conclude that the second research objective is met. Since the mean value of all the atmospheric factors were above 3.0. Researchers now can say that atmospheric factors of theme restaurants are influenced by demographic backgrounds and it is fair to say that restaurant cleanliness is the most influential factor among the factors that trigger restaurant revisit intention despite the differences in the respondents' demographic background. The implication of this study includes in helping the restaurants and outlet retailers out there in training and making aware of their employees about these variables, as well as management, strategies, and objectives. It is also be used as revisions in students' future studies and knowledge because the information written in this research is based on places that are very near to their study place.

**Keywords:** Restaurant; Atmospheric factors; Physical Environment; Revisit Intention

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.*

**A 09**  
CRSE 002

## **Perception Factors Affecting Buying Decisions**

Graipop Pasirom

*Multidisciplinary Design Research Program, Faculty of Architecture, King Mongkut's  
Institute of Technology Ladkrabang, Bangkok, Thailand*

Hobbits70@gmail.com

Perception factor is one of a people process for making a way of life and path of cultural. And the path of cultural will be shown from language, food, lifestyle, decision making, residence and other. So have a difference the space between foreigners and cultural and now in the world, everybody can link to each other and easy to access information. If can be access to understand and perception level it will show how to a mindset in customer group, and this is gold of marketing competition. Besides can generalization, from perception factor link to product design and meet customer expectations. That perception study is essential for truly understanding from the target group, which is a differentiated by the culture and the effect of the perception factors that influence the decision to decision product. Particularly interesting is the practical and cognitive aspects of each culture, which reveal the depth of perception that affects decision making. A result, the product has an opportunity in the new market targetgroup. The purpose of this paper is to study perception factor between foreigners and cultural link to affecting buying decision OTOP Thailand product. The researcher committed



searching for the key in black box perception from affective and cognitive. This concept advocates the perception factor and product design it has responded to customer demand not only one but understanding can make customer direct expectations chance.

**Keywords** Perception, OTOP Product, Product Design, Decision, Cultural

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.*

# **Communications / Social Media Environment**

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

**A 10**  
**CSME 002**

## **Survey on Facility Managers Perception through Instant Message via WhatsApp Application**

Nor Diana Aziz\*, Abdul Hadi Nawawi, Nor Rima Muhamad Ariff

*Centre of Postgraduate Studies, Faculty of Architecture, Planning and Surveying,  
Universiti Teknologi MARA (UiTM) Shah Alam, 40450 Malaysia*

nordiana.aziz@gmail.com

The use of paper-based questionnaires for data collection tends to increase costs, duration and difficulty in distributing survey instrument due to geographical factors. Meanwhile, the online distribution promises more comfortable and time-saving circulation. However, the low response rates via email are often discussed by numerous social scholars. Thus, this study adapts online applications such as an instant message via Whatsapp as a data collection tool that enables a high rate of return promptly. Therefore, this study aims to promote instant messaging application as an effective quantitative data collection method. Thus, two objectives designed in this study; (1) to identify the practical data collection method that is appropriate for facility managers and (2) to analyse the responses among facility managers received from various collection techniques employed. A total of 942 measurement instrument distributed using two appropriate procedure; (1) online questionnaire (2) paper-based questionnaire. The online questionnaire designed using the Google Form distributed by email and instant message (Whatsapp application). Meanwhile, the paper-based survey distributed via face to face interview. At the end of the study, indicates that the use of the online questionnaire survey through Whatsapp application contributes to the highest rate of return (74.14%) when compared to the distribution method via email

(14.53%) shows the lowest return rate. This study has also identified that all responses via Whatsapp were usable and valid to analysed. Meanwhile, contradict with email distribution showed 30 non-usable survey responded by the respondent and need to removed in this study due to rejected and not qualified to answer the data. Indeed, the instant online communication is more likely to attract the attention of the facility manager to respond to this study. Moreover, conducting a questionnaire survey through a user-friendly method can achieve a higher return of response rates, more cost-effective, more time-saving, easy to manage and easy to control bias sampling.

**Keywords:** Facility Managers; Whatsapp Application; Google Form; Survey

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.*

# **Community Environment / Social Psychology**

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

**A 11**  
ComE 001

**Between Survival and Sustenance:  
Plants selection for community recycle edible garden**

Nur Huzeima Mohd Hussain\*, Atikah Fukaihah Amir,  
Norizan Mt Akhir, Khairul Adham Ibrahim

*Department of Landscape Architecture, Faculty of Architecture, Planning and  
Surveying, Universiti Teknologi MARA Cawangan Perak, Malaysia*

nurhu154@perak.uitm.edu.my

The emerging concern on sustainable living has raised attention and urged the community to begin reoccupied again with subsistence farming. However, the scale and involvement with land diversified from the immediate home gardens to the extended community garden. In this context, the role of community edible gardens as repositories of biological and social diversity was acknowledged, but still, the success of it is vague. Community edible gardens, whether found in rural or urban areas, are perceived as a multifunctional space in which enables the provision of various benefits towards the ecosystems and community. Previous studies demonstrate that plants played a significant role and made up of the majority components for the edible garden plantings. Plants can be grown abundantly, however, the success or failure of plants depend on many aspects such as land suitability, climate, maintenance and negligence. Therefore, this study aims to analyse and evaluate the practicality and performance of plants selected in composing the recycle edible garden at Masjid As-Siddiq Seri Iskandar. This collaborative project which involved a group of researchers together with the industrial expert, the masjid committee and the immediate community were designed and built from September 2016 to October 2017. This paper discusses the issues,



challenges and imperatives of how a successful plants selection would lead towards survival and sustenance food for the community. This paper assesses the evolutionary consequences of the plants selection that includes: (a) the selection of plant as soft capes materials; (b) the practicality and performance of selected plants; (c) the maintenance process; (d) the other external considerations; such as climate challenge. The data derived from qualitative and quantitative method through photo and images recorded within the implementation period. The results will interpret relevant information about the plants potential in surviving and becoming sustenance to behold sustainable community through subsistence living. The outcome will also discuss future constraints, and considerations of plants work as an important biological and economical tools that relate to agricultural practices and ecological transmitted in which community may improve their income and livelihood.

**Keywords:** survival; sustenance, recycle edible garden; plants selection

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.*

**A 12**  
ComE 002

**Green Mosque: A living nexus**

Siti Syamimi Omar\*, Nur Hanim Ilias,  
Ruwaidah Borhan, Atikah Fukaihah Amir

*Department of Landscape Architecture, Faculty of Architecture, Planning and  
Surveying, Universiti Teknologi MARA Cawangan Perak, Malaysia*

sitisyamimi@perak.uitm.edu.my

A mosque has always been known as a centre of a Muslim community. Traditionally, mosques, especially in the Middle East perform more functions than just being a place of worship. A mosque is not only for the Muslims to perform prayer in congregation but also as a place to generate economy, education and social cohesion of the community. Hence, a mosque can be considered as a living nexus; the mosque itself is living and bringing life to the community it serves. Therefore, both mosque and its surroundings are living symbiotically together. Green mosque is defined as a multifunctional community centre that is strategically located, accessible, environmental-friendly, support local business, increase social interaction and exploration of knowledge. In this paper, it is aimed to explore the potential of a green mosque in a small newly developed neighbourhood which is Masjid as-Siddiq in the State of Perak as a case study to become a living nexus. The focus of this paper encompasses three main aspects of sustainability which are environmental (site location, accessibility, green space, resource conservation), social (activities, collaborative participation and communal space) and economic (local business, *wakaf* and cost saving). Firstly, the functions of a mosque as a living nexus was analysed; from the Prophet's time compared with the current situations. Secondly, qualitative data on spatial characteristics of

a green mosque were studied based on various literature reviews. Thirdly, descriptive analysis was done to analyse the green aspects potentials of Masjid as-Siddiq. Primary data was obtained through site observations and photographs of the site. Secondary data of site plan, reports, and newspaper articles were also analysed to achieve the aim of this research. Lastly, new recommendations will be suggested for Masjid as-Siddiq. As a conclusion, mosques have always been green historically and indeed, mosques in the modern days have many alternatives to be greener today and for the future.

**Keywords:** Green mosque, community centre, neighbourhood ,sustainability; living nexus

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia.*

**A 13**  
ComE 003

## **Impacts of Resettlements on Orang Asli Community**

Jamalunlaili Abdullah\*<sup>1</sup>, Siti Aisyah Abd Samat<sup>2</sup>,  
Che Bon Ahmad<sup>3</sup>

*<sup>1,2</sup> Centre of Studies for Town and Regional Planning, <sup>3</sup> Centre of Studies for Park and Amenity Management, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA 40450 Shah Alam, Selangor*

jamal858@salam.uitm.edu.my

Various studies have been done on the impacts of development and resettlements of the Orang Asli (indigenous people) of Malaysia. Some found that the development and resettlements have benefited them while others found that there are many negative consequences to the socio-economy and socio-cultural of Orang Asli. Some of important studies are on resettlement of Orang Asli in Bukit Lanjan, Selangor and Prosdet Pantos in Pahang, Malaysia. Most of these evaluated the impacts within the first five to ten years of resettlement. Tasik Kenyir Hydroelectric Dam was developed in the early 1970s to provide hydroelectricity to the Peninsular Malaysia, The inundation of the land to create vast lakes had forced the government to resettle the Orang Asli into a new settlement in 1977, called Sungai Berua . Since then many socio-economic programs have been developed by the government to improve socio-economic conditions of these once nomadic Orang Asli. Permanent houses and in-situ agricultural development were provided for these indigenous people. This paper evaluates the impacts of this Orang Asli after 40 years of their resettlements. It is perhaps different from other researches that evaluate the impacts soon, i.e. within 3 to 5 years after resettlement, in that it is able to evaluate the long term effects of the resettlement. There

are currently 104 families with a population of 553 people in the Sungai Berua settlement which are divided into the Semaq Beri and Bateq ethnic groups. A main method of study is a survey of socio-economic conditions of the Orang Asli households. In addition, interview with the village head (Tok Batin) and official from Orang Asli Development Department were also conducted. Findings show that in terms socio-economic conditions, the Orang Asli have improved their income through palm oil project managed by FELCRA. In addition, due to the proximity to the National Park, they are still able to hunt and gather in the forests. By being in their own resettled areas, they are still able to practice their traditional culture, albeit in a more modern environment.

**Keywords:**Keywords Orang Asli; Indigenous People; resettlement; Socio-economic condition.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 14**  
ComE 004

## **Improving Community Quality of Life through Recycle Edible Garden**

Nur Hanim Ilias \*, Nur Huzeima Mohd Hussain,  
Siti Syamimi Omar, Azran Mansor

*Department of Landscape Architecture, Faculty of Architecture, Planning and  
Surveying, Universiti Teknologi MARA Cawangan Perak, Malaysia*

nurha048@perak.uitm.edu.my

Recycle Edible garden (REG) is an initiative project that practically involved the researchers and designers together with the immediate community. In general, REG was composed to accommodate community with edible resources such as plants, herbs, fruits and vegetables for daily or annually purposes. The objectives of this REG are to (i) motivate community interaction through program involvement; (ii) minimizing living costs by self-produce of daily use plants; (iii) improving the community quality of health through gardening, interacting with neighbours and utilizing the harvested resources for events such as 'kenduri' and gathering. This garden has received unexpected attention from both the experts and public which makes REG significant for the community. The REG Masjid As-Siddiq also apply the green living concept by implementation of rain water harvesting as the watering system irrigation and the used of recycle materials as plants containers and also give an attraction to the garden. This paper documented the rationale, risks and recommendation based on the collaborative design-built process and experiences towards achieving a sustainable community. The aim is to explore the issues and imperatives gained throughout the process and implementation. This study seeks to narrow the gap by making practical

suggestions of the community recycle edible garden to achieve future sustainability through subsistence living. The data derived from the quantitative and qualitative method in which was recorded through meetings, pictures, newspaper updates and surveys. The importance of this recycles edible garden are to connects and communicate between community besides accommodating each other needs through subsistence living. There were about 500 participants representing the researchers and designers, the Masjid committee, the industry experts such as MARDI Negeri Perak, Jabatan Perhutanan Negeri Perak, Pejabat Pertanian Perak Tengah and Taman Teknologi Agro MARDI, Cameron Highland, Pahang, learning institutional like university, college and school together with the business entrepreneur nearby Bandar Seri Iskandar involved in this project. A photographic method comprising the process, issues and situations will be shown and discussed. All data was then analysed descriptively through comparative tables, images and graphs. The results will interpret relevant information about the rationale, risks and recommendation of how REG would benefit and fold the community towards sustainability. The outcome of this study will uphold the benchmark in designing a recycle edible garden that would not only giving experience to the experts to work on the ground, but has also successfully engaged the community in contributing and achieving quality in subsistence living.

**Keywords:** Recycle Edible Garden; Community, collaborative participation; Masjid.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 15**  
ComE 006

## **Localized Innovation of Knowledge Community: Creation of local knowledge and learning landscape**

Hui Chin Huang<sup>1</sup>, Shenglin Elijah Chang<sup>2</sup>

*<sup>1</sup> Ph.D. Candidate, Graduate Institute of Building and Planning, National Taiwan University, Lecturer, Chien Hsin University of Science and Technology. <sup>2</sup> Professor, Graduate Institute of Building and Planning, National Taiwan University*

heidiime@gmail.com

With the trend of the Internet society, the boundary between urban and rural areas gradually becomes indistinct. The circulation of messages and information breaks the spatial limit. Rural areas that have traditions and localness open up the opportunities for innovation in local industries. Along with the trend of returning or going into rural areas, local knowledge and local identity are where the connection between people and environment starts.

In recent years, we can see the development of social learning groups among Taiwanese communities, for example, the Taiwan Field School which co-operate with students and residents in southern Taiwan. Through these three patterns: digging local knowledge, practicing local wisdom, and transferring local experiences, from different action modes to connect local communities as well as from the local knowledge of formatting the power of action, and then the communities and spaces are changed which operates a learning-based innovative industry model.

This innovative energy which mainly comes from young and middle-aged people has also begun to be emphasized in education. From the formal education system, the teaching content and the teaching space at schools, and the emphasis on learning and practice, teachers not only teach



knowledge found in the textbooks but also began to undertake the tasks of teaching and practice. The power of practice gradually became a part of teachers' abilities. Based on the theories of situated learning, this paper explores the process of teachers entering the practice field and changes with regard to the communities.

Based on experience research, the researcher conducted content analysis from Nation Taiwan University, Zhishan High School, and Taiwan Field School. The researcher also interviewed practitioners, educators, and participants to explore the correlation among the creation of learning landscape, the establishment of the knowledge system, and knowledge communities. It facilitates the establishment and re-creation of local identity of practitioners and presents the educational influence on local development.

We analysis the education system, that there is the interaction between the body, space, and network in the community. The findings of this research suggest the "internal gaze" that creating innovative potential among community actors and forming a new model of community participation.

**Key word :** learning landscape, local knowledge, Legitimate peripheral participation.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 16**  
ComE 007

## **Public Library as a Social Interactive Space**

Wan Hashimah Wan Ismail\*, Lily Ting Shu Chi

*Architecture Department, Faculty of Built Environment,  
Universiti Teknologi Malaysia, Malaysia*

*wan7137shima@gmail.com*

This paper elaborates on the current condition of the public library, focusing on the one in Alor Gajah. One of the main issues faced by the public library today is the lack of visitors. The public would rather spend their leisure time at other places, rather than at the library. The other issue is that a public library is normally a place where the visitors are expected to be quiet and restricted by the formality. This aspect compelled some visitors from feeling relaxed inside the library. Scholars suggest that it is crucial to integrate the users' perspectives into the building design as the sense of attachment of the user to a place can greatly affect their attitude towards the spaces perceived. Therefore, the study aims to investigate the perceptions of the locals and their preference of places in Alor Gajah. The findings would be useful in formulating the relevant library design strategies. The methodology of the research includes literature review, observation, questionnaire and semi-structured interview of the locals. The findings significantly showed the unpopularity of the public library at Alor Gajah among the adults. The reasons include the improper location, the formality of the library and the lack of interest in reading among the locals. By understanding the perceptions of the locals, the space planning process of a public library specifically for the said locals is being made easier by simply reflecting the perspectives of the locals on the library design. The role of the public library should be redefined that it should not

be just a place for reading but also a place for community bonding. Thus, the configuration of the library spaces needs to be more focused on the social interactive spaces for the community. In other words, the local favorable element which is food and its related spaces such as cafés, restaurants or food courts can be integrated into the planning of the public library design. To conclude, this study provides a deeper understanding of the perceptions of the locals towards the social place, at the same time reviewing the design of a public library.

**Keywords:** Public library; Social Interactive space; Community.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 17**  
ComE 008

## **The Role of Good Waqf Governance in Achieving Sustainable Development**

Saripah Abdul Latif<sup>1\*</sup>, Nik Muniyati Nik Din<sup>2</sup>  
Zaiton Mustapha<sup>3</sup>

<sup>1</sup>Faculty of Business and Management, <sup>2</sup>Academy of Contemporary Islamic Studies, <sup>3</sup>Academy of Language Studies, Universiti Teknologi MARA Kelantan, Kota Bahru Campus, Malaysia

saripah@kelantan.uitm.edu.my

Good management of charity foundations in Islam, specifically waqf, plays a significant role in achieving sustainable development. Waqf is a voluntary, permanent, irrevocable dedication of a portion of one's wealth – in cash or in kind - to Allah. It is an Islamic institution which existed since the time of the Prophet Muhammad saw. Waqf brings together both the spiritual and material elements. Based on its nature, waqf should be able to act as the catalyst for economic growth as well as the human development, if the institution is systematically and optimally implemented. However, despite possessing the potential of improving the society, a substantial proportion of total waqf is still lying dormant across the world. New frameworks and models for waqf governance have been proposed by several scholars but as yet to be tested. Socially, waqf enables the birth of responsible and accountable citizens which will eventually promote the quality of life. A society that possesses quality of life will eventually become a sustainable group of people. As to this date, more researches have been done on other Islamic institutions rather than waqf institutions. Literatures indicate improper management, legal obstacles and incomplete database as possible determinants of poor governance of waqf. Consequently, waqf

institution failed to function in ensuring sustainable development. The aim of this study is to shed light on a better understanding of the problems related to waqf governance. An exploratory research design with qualitative primary data is adopted for this purpose. A depth interview is carried out on Kelantan State Religion Board (MAIK), This is the authority which is responsible for the implementation of waqf in Kelantan, a state in the Peninsular of Malaysia. The findings showed that legislation and inefficient management are among the possible impeding factors for good governance of waqf. With the revival in waqf practices throughout the world, good governance and best practices of waqf institutions are very much called for.

**Keywords:** Quality of Life, Waqf Governance, Sustainable Development.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 18**  
ComE 009

## **Social Designing Edible Community Networks**

Chen-ting Wu <sup>1\*</sup>, Shenglin Elijah Chang <sup>2</sup>

*<sup>1</sup> Department of Cultural and Creative Industries,  
Hungkuang University, Taichung, Taiwan.*

*<sup>2</sup> Graduate Institute of Building and Planning, National Taiwan University*

jameswu182@hotmail.com

Based on action research methods in between peri-urban and rural communities of Longtan region in Taoyuan Taiwan, the object of our paper is to investigate how to reconnect lives and landscapes to revitalize small towns and shrinking rural villages by cultivating edible community networks. We define edible community networks as social designing local food to connect three major domains: autonomous processes, environmental friendly economies, and cross-cultural landscape identities. Modern lives, industrial revolutions, and global business have been profoundly impacting rural communities worldwide. The local communities in a peri-urban and rural area of the Longtan region could serve an empirical case as we investigated for four years. When we first entered the Longtan region, communities had been struggling with the mass productive tourism economic developments. We initiated participatory processes to engage local business, village farmers, restaurant owners, youth groups, government officials, Non-profit organizations, religious leaders, and community key persons to negotiate collective actions to interlink each other within the eco-system of the food business in the Longtan region.

The findings of our research suggest that food embody social relationships as well as economic connections. Rural revitalizations could be established via integrating food connections among urban consumers, tourists, farmers, business owners, and community groups. With dynamics of social food chains, each small individual restaurant could invent its characteristic taste that would improve their business as well as local identities. By doing so, small farmers and business owners could collaborate to create their community-based resource exchange networks. In conclusion, we identify that by inventing food products, cooking skills, food design, local food market connections, small business and household farmers in peri-urban towns and rural villages could revitalize their local economy and cultural identities. Similar towns and rural villages might implement the social design of the edible community network as their strategies for local revitalizations.

**Keywords:** food research , social design, community development, Edible Community Network

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

# **Construction Environment**



*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

**A 19**  
CoE 001

## **Evaluating the Impacts of Design Errors in Construction Project**

Nurul Huda Muhamad\*, Mohammad Fadhil Mohammad

*Faculty of Architecture, Planning & Surveying, , Universiti Teknologi MARA, Seri  
Iskandar Campus, Seri Iskandar, 32610, Perak, Malaysia*

nurul885@perak.uitm.edu.my

Design errors in construction projects are always going to happen and cannot be avoided. Design errors leading to rework and/or design changes are considered to be the primary contributor to disruption of time and cost performance of construction projects. Rework has been identified as an endemic problem in construction and engineering projects. A detailed study of design errors is needed since the practitioners had an extreme difficulty associated with proving disruption. Previous research lacks detail studies of design errors especially in Malaysian context. This paper discusses a preliminary study of analyzing the relationship of design errors and the consequent rework, to recognize their resulting impacts on project performance and to provide insights for directing further studies in Malaysia context. Such identification would help project practitioners to understand the impacts of design errors, adversely adding understanding the nature of disruption. The research findings could be beneficial to all project participants for gaining better understanding the complex mechanism of design error in order to achieve the successful

performance of construction project. This paper provide a meaningful step to better understanding and assessing the impact of design errors.

**Keywords:** Design errors; rework; design changes.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 20**  
CoE 002

## **Introducing Kaizen method for Process Improvement towards the Intention of BIM Adoption by Facility Managers**

Nor Diana Aziz\*, Nor Rima Muhamad Ariff, Abdul Hadi Nawawi

*Centre of Postgraduate Studies, Faculty of Architecture, Planning and Surveying,  
Universiti Teknologi MARA (UiTM) Shah Alam, 40450 Malaysia*

nordiana.aziz@gmail.com

Building Information Modelling (BIM) has promised to bring a better Quality of life (QOL) in facilities management (FM) industry. Nevertheless, low adoption of BIM is still a concern. The problem critically reviewed that the facility managers were fear to adopt and introduce BIM technology in the workplace. This study was an attempt to promote the Kaizen method for the resolution of facility manager's intention of BIM adoption for the higher usage this technology in FM. The *Kaizen* method was well accepted in the lean management of manufacturing industry. Meanwhile, this method seems less discuss in FM industry attracted the researchers to study in-depth and introduce this method as the resolution. Thus, the objective of this study is to analyse the leadership competencies attributes that significance with the intention of BIM adoption in FM. Later, the *Kaizen* method introduced in this study for the resolution of non-support attributes. Thus, to carry out the study, the non-biased facility manager's perception collected by online and paper-based survey. The survey consisted of the parameter for the facility manager's leadership competencies, and their intention to adopt BIM questioned. Also, the questionnaire distributed via paper-based and online distribution to get their perception. The total of 302 useable responded survey analyses and explained via none parametric

measurement tools (PLS-SEM software). The result revealed that only three leadership competencies attribute significantly with the intention of BIM adoption namely visioning, team leadership and leadership behaviour. More in-depth, the result of null hypothesis attributes later discussed in depth in the discussion. The study also introduced a Kaizen method as the process improvement technique for four (4) non-support attributes namely achievement, empowerment, teaching and change management. At the end of the study, the introducing *Kaizen* method for the resolution of none support attributes promised the low cost and also enhance the employee morale. Moreover, the *Kaizen* method seems as the efficient process for the attempt to introducing the new technology in the workplace.

**Keywords:** Facility Management, Intention to Adoption, BIM, Kaizen.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

# **Educational / Learning Environment**



**A 21**  
ELE 001

## **Collaboration in Conceptual Architectural Design: The Differentiated Functions of Sketch and Digital Modalities**

Danfulani Babangida Idi <sup>1\*</sup>, Khairul Anwar Mohamed Khaidzir <sup>2</sup>

*<sup>1</sup> Department of Architecture, Faculty of the Built Environment, Universiti Teknologi Malaysia, Malaysia., <sup>2</sup> Department of Architecture, Faculty of the Built Environment, Universiti Teknologi Malaysia, Malaysia.*

[babangida2010@gmail.com](mailto:babangida2010@gmail.com)

Collaboration is seen by many as an essential strategy that produces an outcome that is beyond individual vision. The majority of literature defines it as two or more people sharing their differences constructively to search for a common goal. However, defining collaboration in the context of design as two or more designers working together to achieve a common design goal appeared to be very basic. As the definition does not in any way indicate the modality and parameters that can transform designers' tacit knowledge into explicit building product. Instead, it can be assumed that the definition undermines the rationale that collaboration can improvise efficiency and effectiveness of sharing design ideas. Moreover, this implies that there is no clear understanding of whether complex design activities such as actions, transformation, and reasoning can be readily circumscribed into collaborative settings. This presents one of the most significant challenges of realizing the much-anticipated collaborative approach to design problem-solving. Therefore, there is the need to establish the actual definition, characteristics, impact, strategy, and rationality of collaboration in the context of design. These highlighted problems prompt this research to use the experimental technique in



investigating the phenomenon of collaboration in design. The experiment consists of eight different design teams subjected to the usage of sketch modality to design a bus stand and a digital modality to design a commercial kiosk. Coding scheme based on design action, transformation, reasoning and knowledge transformation is employed to generate empirical data from the protocols of the two modalities. Statistical analysis using Chi-Square cross tabulation has established a significant association between the two modalities and design activities. The results indicate that the design activities of the two modalities are statistically different concerning the distributions of frequencies and duration. Higher framing, abduction and lateral transformation are not affected by the sketch modality but affected by the change to the digital modality. Similarly, higher moving, deduction, and vertical transformation are not affected by the digital modality but affected by the sketch modality. Furthermore, the correlation analysis of the sketch modality established a significant relationship between socialization, abduction, framing and lateral transformation. On the other hand, a significant relationship was also found between combination, deduction, moving and vertical transformation in the digital modality. Some implications of the role of knowledge transformation in design collaboration are discussed. The research has established that sketch has got some important characteristics of actions, reasoning and knowledge transformation in design collaboration. In conclusion, the researcher developed a design activity pattern for design collaboration. Future study can be carried out on the need to support and enhance the sketch modality for effective design collaboration.

Keywords: Design; Collaboration; Conceptual Design; Design Modalities

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 22**  
**ELE 002**

## **Discovering Students Expectation in Outdoor Learning Environment**

**Noralizawati Mohamed, Noriah Othman**

*Centre of Studies for Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, 42300 Puncak Alam, Selangor, Malaysia*

leezmohd@yahoo.com

In 21<sup>st</sup> century education, learning through actual experience and ability to collaborate with surroundings are very important. Previous research identified that students who are being exposed to outdoor learning environment could have better opportunities to assimilate new information, conduct an experiment and observation throughout their learning process. The importance of learning experience is also highlighted in the Malaysian Education System and become one of tools to measure students' learning outcomes in related field. This study presents the importance of conducting on-site experiential learning by linking students learning experience with outdoor setting. This study aimed to identify the potential of Perdana Botanical Garden as an outdoor learning environment for various plant species. The objectives formulated for this study are (1) to identify factors that encourage outdoor learning experience and (2) to discover the student expectation from the outdoor learning. Sixty students from Landscape Architecture programme were involved in the survey. The questionnaire was divided into five sections; demographical background, students' opinions on the garden as outdoor learning, students' expectation and also open-ended question regarding their overall opinion and suggestion for improvement. They were also asked to rate their

understanding at every learning station based on explanation given by the garden moderator. T-test showed the mean comparison of various variables related to the visitation were lower for the male than the female students. Majority of students agreed that this activity gave positive outcomes such as improving their knowledge, increased learning interest and encouraged creativity. The learning facilities and professional moderators were found to increase students' interests and motivation. However, some students suggested that the learning space should be occupied with proper plant tagging and interactive media to support the learning experience. Site activities such as herbarium collection and plant identification for learning reflection could give them more exposure and close to the nature. It is hoped that this study can promote the benefits of experiential learning and facilitate knowledge transfer thus produce a good quality of students and learning behavior in natural environment.

**Keywords:** Students expectation; Outdoor learning environment; learning experience;

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

ELE 003

## **The Orthorexia Nervosa and Quality of Life among Health Sciences Students**

Mohd Ramadan Ab Hamid<sup>1\*</sup>, Nurfarhah Najwa Azman<sup>1</sup>,  
Norimah Said<sup>2</sup>, Aiman Nadia Akmar Rahman<sup>3</sup>

*<sup>1</sup> Centre of Nutrition and Dietetics, Faculty of Health Sciences, Universiti Teknologi Mara, 42300 Bandar Baru Puncak Alam Selangor, Malaysia. <sup>2</sup> Centre of Nursing, Faculty of Health Sciences, Universiti Teknologi Mara, 42300 Bandar Baru Puncak Alam Selangor, Malaysia. <sup>3</sup> Centre of Physiotherapy Faculty of Health Sciences, Universiti Teknologi Mara, 42300 Bandar Baru Puncak Alam Selangor, Malaysia*

ramadan7230@puncakalam.uitm.edu.my

Nowadays people are becoming obsess towards healthy foods. This obsession is called as Orthorexia Nervosa (ON). ON has been shown related to quality of life (QoL). The students who experienced ON spend a lot of time on buying or preparing healthy foods. They may experience guilt and incomplete without having healthy foods and this is a harmful behavior, because healthy eating is connected with fear and worries. ON will negatively impact the quality of life of the students' psychological and social relations. Thus, the objectives of this study are to determine the prevalence of Orthorexic, to assess the quality of life and to identify the association between Orthorexia Nervosa and Quality of life among students. A total of 138 students from Faculty of Health Sciences had participated in this study. Students completed Orto-15 and WHOQOL-BREF self-administered questionnaires. Anthropometric data (weight, height and body fat) were measured. The result was analysed statistically using SPSS 21.0. Descriptive statistic, independent t-test, One-Way Anova test and Pearson chi-square test were performed. The prevalence of Orthorexic tendency among students is high (67.4%). For Quality of Life, psychological domain scored the highest (M=64.14, SD=11.74), while the

social domain was the lowest ( $M=62.52$ ,  $SD=11.41$ ). The results indicate students had enjoyment and meaningful life satisfaction in university, thus perform a good psychological relation. There are no significant differences between gender, courses, BMI and body fat on Orthorexia Nervosa ( $p<0.05$ ) and QoL ( $p<0.05$ ). This study provides a baseline data on Orthorexia Nervosa and Quality of life among students. Structured programs, educational approaches, and intervention are needed for improving university students' eating behavior and QoL.

Keywords: 1; Orthorexia Nervosa, 2; Quality of Life, 3; Health Sciences Students

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 24**  
**ELE 005**

## **Profiling the Existing Interior Learning Environment of Tahfiz Centre in Identifying Environmental Engaging Framework**

Nur Atiqah Jamaludin<sup>1</sup>, Nurlelawati Ab. Jalil<sup>1</sup>, Arita Hanim<sup>2</sup>

*<sup>1</sup> Department of Applied Arts and Design & Kulliyah of Architecture and Environmental Design, <sup>2</sup> Department of Architecture & Kulliyah of Architecture and Environmental Design, International Islamic University Malaysia, Malaysia*

eykadean@gmail.com

Tahfiz centres are institutions that are accountable for educating students to memorize and recite the whole Al-Quran. The number of tahfiz centre in Malaysia is consistently growing from only 58 in 1999 to 278 in 2011 with more than 95% of them are privately owned (www.darulquran.gov.my, 2017). The pattern is showing high demands and expectation to Tahfiz education system mainstream among the society in Malaysia. As stated by Hashim (2013), due to high demands of enrolment and issues regarding standard school environments, it is high time the aspect of conducive space for Quran memorizing to be studied, which is the key factor in ensuring the quality of the offered program and standard of the produced Hafiz and Hafizah. Therefore, all tahfiz centres and schools have to consider about existing Tahfiz learning environment and have to review on the existing facilities condition and the current learning environment because those factors will influence the quality of Tahfiz product that is Huffaz. Due to this issue, profiling the existing interior learning environment of Tahfiz Centre in identifying environmental engaging framework become essential to enhance the quality of quranic generation produced in future. The aim of this research is to understand what are the

interior elements that appropriate to improve engagement of Quranic learning in tahfiz centre. The objectives of this research are; to observe the interior condition of tahfiz centre in Selangor; to identify the suitable interior elements that can accommodate an engagement to the environment in memorizing the Quran in the centres and to formulate environmental based-design framework at tahfiz centre. Methodologically, this research is carried out by interviewing administrative officers and educators at the tahfiz institutions. Besides that, an observation also has been made at several Tahfiz Centres and Schools. Some case studies were ran from literature reviews and selected existing Tahfiz centres and schools on Tahfiz learning spatial condition and the elements that make up the existing Tahfiz learning environment. The finding of this study is significant for the Tahfiz Centres to upgrade the quality of facilities as well enhance the understanding the use of appropriate environmental engagement element in Tahfiz Centre for a conducive learning environment.

**Keyword:** Tahfiz, Tahfiz centre, Tahfiz learning environment, Tahfiz environmental engaging framework.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 25**  
**ELE 004**

## **Weight Reduction among Overweight and Obese Students in Higher Learning Institutions**

Ajau Danis<sup>1</sup>, Sarah Hairudin<sup>2</sup>,  
Mohd Suleiman Murad<sup>3</sup>, Khairil Anuar Md Isa<sup>1</sup>

*<sup>1</sup>Basic Science Department, Faculty of Health Sciences, Universiti Teknologi MARA Cawangan Selangor, <sup>2</sup>Nutrition and Dietetic Department, Faculty of Health Sciences, Universiti Teknologi MARA Cawangan Selangor, <sup>3</sup>Occupational Therapy Department, Faculty of Health Sciences, Universiti Teknologi MARA Cawangan Selangor, Malaysia*

ajaudanis@puncakalam.uitm.edu.my

The increase prevalence of overweight and obesity are associated with individual health behaviour, whereby, more people are practising sedentary lifestyle combined with greater calorie intake. In Malaysia, obesity seems to be an issue that affects the population's quality of life. Obesity was known to be the risk factors for chronic illness such as diabetes, hypertension and some types of cancer. However, the risk of having these illnesses can be reduced through weight management or reduction through adopting a healthy lifestyle such as healthy eating and physically active. Weight reduction process amongst overweight or obese can very challenging and needs higher motivation. The lens of this research was based on the Transtheoretical Model or Stages of Change Model. The objectives of this study were to assess the level readiness to weight reduction, motivation level and perceived barriers to weight loss among overweight and obese students in higher learning institutions. A cross-sectional study was conducted at Universiti Teknologi MARA, Selangor, Malaysia uses a convenience sampling design. A total of 243



respondents was selected among overweight and obese students. Body mass index measurement was done to determine their body weight category prior to the data collection by using questionnaires. Data analysis was carried out using SPSS software version 22.0, meanwhile the statistical analysis was done descriptively. The results show that 6.6% of the respondents are in pre-contemplation stage, 37% in the contemplation stage, 11.1% in the preparation stage, 37% in action stage and 8.2% in the maintenance stage. Meanwhile the motivation level of weight reduction was 50.6% higher level, and low motivation was 49.4%. The commonly perceived barriers to physical activity were time, friend support and motivation while in healthy eating the most common barriers were motivation, time and enjoyment. In conclusion, this study demonstrated a positive outcome on readiness to lose weight as among overweight and obese respondents with only a small proportion of the respondents were not intended to lose weight. Support and motivation for those who are taking action to reduce their weight is necessary for them to continually achieve and maintaining their ideal weight to lead a good quality of life.

**Keywords:** Overweight and obesity, Readiness to change, Barriers to weight reduction, Motivation to weight reduction

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

# **General Psychology**



**A 26**  
**GP 001**

## **A Systematic Review on Determinants of Subjective Well-Being**

**Nurul Hafizah Azizan\* , Zamalia Mahmud**

*Statistics Department, Faculty of Computer and Mathematical Sciences,  
Universiti Teknologi MARA, Malaysia*

[hafizahaz@kelantan.uitm.edu.my](mailto:hafizahaz@kelantan.uitm.edu.my)

In recent years, there has been increasing in number of research focusing on subjective well-being issues in many countries all over the world. It also received special attention from the Malaysian government nowadays in order to improve overall quality of life of the people in the country. Subjective well-being concerning with people happiness and overall life satisfaction towards their own day-to-day life experience. This systematic review is conducted to explore and highlight the important dimensions of subjective well-being to be research on in detail in future study. This is because, it is crucial to identify the possible dimensions of subjective well-being, so that it can assist the practitioners and policy makers in making practical public policies which can benefits the society in various levels. A total of 100 articles have been selected to be reviewed in this study obtained from academic search engines and online databases (ezAccess UiTM Library) which are Google Scholar, ScienceDirect, Scopus and Web of Science (WOS). This review has been conducted within a period from June 2017 until December 2017. Only articles obtained through journals indexed in Scopus and ISI will be included in this study. Therefore, to confirm validity of the journal articles obtained from Google Scholar, the name of the journals have been technically examined through Scimago and WOS online system. From the review, even there are contradictory

results from the previous studies; it was found that beside health, the socio-economic attributes such as income, employment, education and also housing affordability are the most focusing determinants of subjective well-being among the society. For future research, it is recommended that to further study through interviewing target respondents to gain more relevant information that actually faced by the society in current phenomenon. Moreover, it is also suggested that to empirically identifying the most contribution factors of subjective well-being among the society as the results that will obtain through empirical research will provide more accurate findings and will become a useful guidance for the government in implementing the effective policies to the people in the country.

**Keywords:** Subjective well-being; health; socio-economic attributes

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

# **Health / Healing Environment**

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

**A 27**  
**HE 001**

## **A Review of Sensory Design Physical Learning Environment for Autism Centre**

**Roslinda Ghazali, Siti Rasidah Md Sakip**

*Department of Post-graduate,  
Universiti Teknologi MARA, Kampus Seri Iskandar, Perak, Malaysia*

*lindakering@gmail.com*

The Malaysian Government aims to become a regional centre for education and targeted to have as many pupils as possible attend the pre-school education. It is important for children at the age four to six years old to attend as preparation for the next primary education. However, children with Autism Spectrum Disorder (ASD) also are not exclude from education. ASD is a cluster of neurodevelopmental disorders that impairs verbal and non-verbal communication and social interaction by showing themselves in repetitive behaviour, sensory issues, and cognitive delays. Without the appropriate educational arrangements, autism becomes a lifelong handicap that affects the lives of the individuals and the people around them. With proper learning environment, many autistic children can continue their lives with their peers who exhibit regular development. Autistic children are encouraged to continue their education in different learning environments. Therefore, designing learning environment are unique and should consider the sensory issues to overcome critical set of human factors when designing built environments—the effects of sensory stimulation on people who use the environment. They can survive independently with encouragement to continue their education in different learning environments. The objectives is to identify sensory issues for



design consideration in a physical learning environment. The paper aims to review deeply on sensory issues of Autism Physical Learning Environment. Sensory design, sensory stimulation, sensory garden, safety and security would discuss thoroughly which is important to consider the needs of children with neurological disorders and to think through the space as an experience to autism. Sensory design is designing for living, which how a space feels, sounds, looks, smells and functions can be affecting one or more of the seven senses that gives impact on autism. In conclusion, this could ultimately help designers to gain better understand the sensory design and it could contribute to architects and designers to use during design stage and create a quality environment for autistic children within the Malaysian context.

**Keywords:** Sensory design; autism; physical learning environment.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

A 28  
HE 002

## **Breastfeeding Knowledge, Attitude, Prior Exposure, and Intention to Breastfeed among Undergraduate University Students**

Syahrul Bariah Abdul Hamid, Nabilah Yahya

*Centre of Nutrition & Dietetics, Faculty of Health Sciences, Universiti Teknologi  
MARA Selangor, Puncak Alam Campus, 42300 Puncak Alam, Selangor, Malaysia*

syahrulbariah@puncakalam.uitm.edu.my

The Theory of Planned Behaviour by Ajzen (1985) states that breastfeeding intention is influenced by several factors including attitude, knowledge and exposure. It has been established that breastfeeding intention, which predicts future breastfeeding outcomes, is made prior to pregnancy. Thus, there is an urge to identify the predictors of breastfeeding intention among young adults since the decisions of infant feeding are often made before children are conceived. Therefore, this study was conducted to investigate the level of breastfeeding knowledge, attitude, prior exposure and intention to breastfeed and the relationship between these factors among non-pregnant, single undergraduates. At present, there are limited studies in Malaysia involving young adults who will be future parents. This cross sectional study involved 377 students in UiTM Puncak Alam, Selangor. Data was obtained via convenience sampling. Self-administered questionnaires adapted from FORM A and Iowa Infant Feeding Attitude Score (IIFAS) were included as research instruments. The present study found that the overall study population had a low level of knowledge, and attitude towards breastfeeding. However, they had good exposure towards breastfeeding exposure and the intention to breastfeed. Female students had a high level of all breastfeeding

measures. Breastfeeding knowledge is significantly associated with breastfeeding attitude and prior breastfeeding exposure. Breastfeeding intention is also found to be closely associated to breastfeeding attitude and prior breastfeeding exposure. Subsequent predictive analysis found that breastfeeding attitude impacts breastfeeding intention. Breastfeeding intervention should target undergraduate university students in preparing these future parents with adequate and accurate knowledge and positive attitudes towards breastfeeding thus, resulting in higher breastfeeding intention and greater efforts of initiation and sustenance of breastfeeding.

**Keywords:** breastfeeding knowledge; breastfeeding attitude; breastfeeding intention; breastfeeding exposure.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 29**  
**HE 003**

## **HIV Knowledge, Attitude and Perception among University Students**

Norimah Said<sup>1</sup>, Mohd Ramadan Ab Hamid<sup>2</sup>  
Laily Azmira Tarmizi<sup>1</sup>, Nor Afifah Azizan<sup>1</sup>

*<sup>1</sup>Centre of Nursing , Faculty Health Sciences, Universiti Teknologi MARA Selangor, Malaysia. <sup>2</sup>Centre of Nutrition and Dietetics, Universiti Teknologi MARA Selangor, Malaysia*

[norimah2809@puncakalam.uitm.edu.my](mailto:norimah2809@puncakalam.uitm.edu.my)

HIV is a retrovirus that infects cells of the immune system, destroying or impairing their function. As the infection progresses, the immune system becomes weaker, and the person becomes more susceptible to diseases. Young people aged 13 to 29 contributed the total of 34% of the cumulative. Even the number of new cases of HIV infection was steadily decreasing over the past decade, the number of young people infected with HIV was rapidly increasing. In Malaysia, for the year 2010, 312 cases involved students were recorded with 69 cases of AIDS. Although, in the year 2014 the total of 73,005 between aged 15 to 49 years old was estimated has been infected with HIV. These facts would be a nightmare for our country if reasonable attention were not given to it, especially the young people are the future generation of our country. Thus, preventive measures should be taken to reduce the spreading of these harmful diseases. This study was carried out to determine the level of knowledge, attitude and perception among UiTM Selangor, Puncak Alam students. The method for this study was used cross-sectional via convenience sampling method. The data was collected using validated questionnaire. The sample size is calculated using Raosoft Sample Size Calculation with total 372

respondents. The analysis of this study indicated that overall students had good knowledge (Mean=2.26), regarding HIV mode of transmission but misconception toward HIV infection still need to be the concern. The result shows only demographic data that has a relationship toward knowledge of HIV infection, ( $t(1, n=372) = 8.86, p=.03$ ). It was reported that there is a weak positive correlation between knowledge and attitude ( $p<0.05$ ). There is also a weak positive correlation between knowledge and perception of HIV infection among students ( $p<0.05$ ). The knowledge about HIV among students is incomplete as misconceptions regarding HIV transmission need to be corrected. The positive attitude and perception should be improved to reduce the stigma and discrimination toward people living with HIV/AIDS by implementing continuing education program among young people as the prevention method.

**Keywords:** Human Immunodeficiency Virus (HIV), Knowledge, Attitude, Perception.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 30**  
**HE 004**

## **Internationalisation of Hospitals in the Wake of Green Agenda: How much more to be done?**

Nuraisyah Chua Abdullah<sup>1\*</sup>, Herwina Rosnan<sup>2</sup>,  
Norzayana Yusof<sup>3</sup>

<sup>1</sup>Faculty of Law, Universiti Teknologi MARA (UiTM), 40450 Shah Alam, Selangor, Malaysia <sup>2</sup>Arshad Ayub Graduate Business School, Universiti Teknologi MARA, 40450, Shah Alam, Selangor, Malaysia. <sup>3</sup>Faculty of Business and Management, Universiti Teknologi MARA, 40450, Shah Alam, Selangor, Malaysia

nuraisyahc@yahoo.com, nuraisyah@salam.uitm.edu.my

Although the healthcare sector strives to save people from environmentally-related diseases, the hospitals contribute to the adverse environmental impacts. The Global Green and Healthy Hospitals (GGHH) Agenda in the US posits that hospitals are the second most rigorous buildings that consume more than US\$7 billion (RM27.23 billion) a year on energy. Apart from that, hospitals in Brazil add to 10% of the total energy consumption in the country. Contrary to the conventionally built environment of hospitals, green hospitals encourage public health through continuous reduction of its impact on the environment and the burden of the diseases that come along. Furthermore, the concept also acknowledges the association between human health and the environment through the hospitals' operations, governance and strategy. After energy efficiency, the US' Environmental Protection Agency also delineates the top four strategies for healthcare green building, i.e. sustainable flooring material selection, water efficiency, lighting efficiency, and indoor air quality. On the other hand, Asian countries, for example, India, Nepal, the Philippines, South Korea and Taiwan, outlines ten

broader areas to be addressed in promoting greener healthcare service — leadership, chemicals, waste, water, energy, food, transportation, pharmaceuticals, buildings and purchasing. In view of the tools and assessments of sustainable development characteristics for Malaysia's public hospital building development, i.e. the Malaysia Sustainable Development Approaches at State Level and Green Building Index (GBI), the Compendium of Environment Statistics Malaysian Urban Indicator Network (MURNINet), the Malaysia Quality of Life Index (MQLI) and the Malaysia Urban Quality of Life (MUQL), this paper examines the green environment policy in the Malaysian medical hospital framework in comparison with selected countries. Later, this article provides suggestions for the betterment of the green agenda and practices. The ideas are hoped to enable the hospitals in Malaysia to compete at the international arena in its mission to upgrade medical tourism in the nation.

Keywords: Green Environment Policy; green healthcare; internationalisation; hospitals.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

A 31  
HE 005

## Perceived Barriers in Physical Activity Among University Students

Theresa Ahing<sup>1</sup>, Nur Afifah Hamjah<sup>1</sup>,  
Cyndra Robert Budull<sup>1</sup>, Nur-Hasanah Ruslan<sup>2</sup>

<sup>1</sup> Faculty of Sports Science and Recreation, Universiti Teknologi MARA, Cawangan Sarawak, Malaysia. <sup>2</sup> Faculty of Sport Science and Recreation, Universiti Teknologi MARA, Cawangan Pahang, Jengka, Pahang, Malaysia

theresaahing@sarawak.uitm.edu.my

**Background:** Physical activity is a very important aspect in preventive and curative of the chronic diseases. The National Health and Morbidity Survey of 2015 have found that 17.7% of the Malaysian population were obese and another 30 % were overweight. Surprisingly, physical activity decline was started at the time when teenagers entering a university. Thus, the factor associated with physical inactivity should be identified.

**Objectives:** The aim of this study is to identify the internal and external perceived barriers toward physical activity and its relationship with physical activity among university students. **Methodology:** The cross-sectional design was used among university students (n=397) by means of purposive sampling technique. The Short Version International Physical Activity Questionnaire (IPAQ) and Perceived Barriers in Physical Activity among University Students Questionnaire were used as the instruments for this study. The Perceived Barrier Questionnaire consists of 12 items with six constructs and the items were rated on a 5-point Likert-type scale. The data were analysed using Spearman Rank Order Correlation (IBM SPSS version 22). **Finding:** This present study revealed that female students were found to be less active than their male counterpart. The



results indicated that Perceived External Barrier were more affected in influencing the physical activity compared to Perceived Internal Barriers among university students. This study found that there was a weak relationship between internal barrier and physical activity, while there was strong relationship between external barrier and physical activity. **Implication:** The future research need to carry out in a larger sample to represent Malaysian university students as a whole and the intervention should be focuses on the identified barriers to improve physical activity among university students.

Keyword: Perceived Internal Barrier, Perceived External Barrier, Physical activity level, University students

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

A 32  
HE 006

## Perception of Pharmacy Staff about CAM in Hospital

Che Noriah Othman <sup>1</sup>, Maryam Farooqui <sup>2</sup>, Norrina Din <sup>3</sup>

<sup>1</sup> Faculty of Pharmacy, UiTM Pulau Pinang, Bertam Campus, 13200, Kepala Batas, Penang, Malaysia., <sup>2</sup> Department of Pharmacy Practice, Unaizah College of Pharmacy, Qassim University, Unaizah, Qassim, Saudi Arabia. <sup>3</sup> Department, Faculty, <sup>3</sup>. University, 3. Faculty of Hotel Management, UiTM Pulau pinang, 13500, Permatang Pauh, Penang, Malaysia.

chenoriah.othman@ppinang.uitm.edu.my

**Introduction:** This study observed the knowledge and perception of Pharmacy staff towards Complementary and Alternative (CAM) Medicine in one government hospital in Penang, Malaysia. **Objective:** The objectives of the study were to assess Pharmacy Staff's perceptions on Complementary and Alternative Medicine (CAM), to determine the barriers and the frequency of using use Complementary and Alternative Medication (CAM). **Methodology:** This survey was a cross-sectional study, conducted among 60 out of 100 pharmacy staff in a chosen hospital. A validated questionnaire comprised of six sections was used to gather the data. Data were coded and entered into SPSS version 23.0. **Result:** Minority of the respondents agreed that CAM is a threat to public health. Majority of the respondents agreed with all the statements about barriers towards CAM. Most of the respondent willing to use CAM when they had a condition for which no known cure existed and used CAM in conjunction with conventional therapies. Regarding the sources of information, the primary sources were from the mass media and internet. The most popular type of CAM used by the respondent is massage therapy. **Discussion:** In general, pharmacy staffs have good knowledge and perception towards CAM. The sources of information on CAM are internets and mass media.

**Conclusion:** Most of the pharmacy staffs has a positive feedback towards CAM.

**Keywords:** Keywords 1; Traditional and Complementary Medicine 2; Pharmacy Staff 3; Perception 4 Government Hospital, Malaysia.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 33**  
**HE 007**

## **Psychological Influence towards Health Consumers Intention to use Malaysia-Web based Health Information Service**

Siti Noraini M. Tobi<sup>1\*</sup>, Maslin Masrom<sup>2</sup>,  
Erne Suzila Kassim<sup>3</sup>, Yap Bee Wah<sup>4</sup>

*<sup>1</sup>Faculty of Business and Management, Universiti Teknologi MARA, Puncak Alam, Malaysia. <sup>2</sup>Razak School of Engineering and Advanced Technology, Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia <sup>3</sup>Faculty of Business and Management, Universiti Teknologi MARA, Puncak Alam, Malaysia. <sup>4</sup>Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA, Shah Alam, Malaysia*

snoraini7601@puncakalam.uitm.edu.my

The main highlight of this paper is regarding Malaysia web-based health information service created particularly to educate health consumers concerning health issues. This study was conducted to investigate the role of Health Belief Model as the psychological predictor for web-based health information service's usage intention particularly on a national web-based service that is MyHEALTH Portal. This study utilized an online survey among the identified users that accessed the portal hosted on the official MyHEALTH Portal website. A convenience sampling technique was applied in recruiting respondents involving 223 respondents. The analysis involved two stages of survey data analysis in which the first stage dealt with data preparation through preliminary analysis while in the second stage, a confirmatory factor analysis was conducted to assess the measurement model followed with the structural model to confirm the

proposed hypotheses. With regards to the psychological predictor of health consumers' intention to use the portal, results showed external cues did not significantly influence the relationship while outcome expectations and internal cues showed significant results. The findings would help Malaysia Ministry of Health in identifying significant psychological factors that influence the portal usage. This would allow them to re-strategize the portal's marketing and promotional works effectively thus to be maximally used by the public while achieving its long-term goal.

**Keywords:** Health consumers, Intention to use, MyHEALTH H portal, Web-based health information service

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

# **Hospitality / Tourism Environment**

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

**A 34**  
HTE 001

## **An Integrated Tourism Model based on Local Identity for Ecological, Historical, and Cultural Tourism**

Natapon Anusorntharangkul <sup>1\*</sup>, Yanin Rugwongwan<sup>2</sup>

*<sup>1\*</sup> Arch D. Student, Multidisciplinary Design Research Program, <sup>2</sup> Asst. Prof., Ph.D.,  
Faculty of Architecture, King Mongkut's Institute of Technology Ladkrabang  
(KMITL) 10520, Thailand*

natapon15@hotmail.com

Design Conveying Local Socio-cultural Identity explains the importance of local identity linked to society and way of life in the past which is a heritage of remaining faith. Conservation and enhancement of the historic environment viewed as a desirable undertaking. Preservation and study of such resources contribute to overall social wellbeing. Through understanding and appreciation of the past within a social context and environment. By mean of the organization of the space, time, interaction, communication, and cue. Especially noteworthy is explaining the importance of local identity linked to society and way of life in the past which is a heritage of faith reflected in the plan which transferred to the design process and pattern. That resulted in a partnership between government and private sectors have involved in establishing systems and methods to coordinate sustainable development causing the key to the tourism development. The objective of this paper is to study local identity and explore the potential for regional resources management and valuation of the historic environment a case study of the north-eastern provinces of Thailand, for guiding the tourism environmental design elements. The point of view has the goal creative integrate tourism model and product development from local identity embedded localism. This



concept advocates the philosophy that tourism businesses must develop products and marketing strategies that not only address the needs of consumers but also safeguard the local identity.

**Keywords:** Architectonic; Local Identity; Environmental Design; Tourism model; Ecological.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 35**  
**HTE 003**

## **Guidelines for Antarctic Tourism: An evaluation**

**Nuraisyah Chua Abdullah\*, Rohani Mohd Shah**

*Faculty of Law,  
Universiti Teknologi MARA (UiTM), 40450 Shah Alam, Selangor, Malaysia*

nuraisyahc@yahoo.com, nuraisyah@salam.uitm.edu.my

Commercial tourism began in the 1950s when fare-paying passengers travelled aboard Chilean and Argentinian naval vessels to Antarctica. The perceived wilderness nature of Antarctica, while increasingly drawing visitors interested in its outstanding natural values may, paradoxically, lead to the continent's destruction. The International Association of Antarctica Tour Operators (IAATO) which was founded in 1991 by seven tour operators, represents the interests of the Antarctic tourism sector. It is dedicated to appropriate, safe and environmentally sound private-sector travel to the Antarctic. Currently, sixty-nine organizations are members (in different categories) of the association. It takes many initiatives to increase the environmental awareness of its members. IAATO acknowledges that unregulated tourism in Antarctica would cause significant consequences to an environment which is already extremely vulnerable to the impacts associated with human activities. This paper discusses the IAATO bylaws which include the obligation to respect the relevant provisions of the Protocol on Environmental Protection to the Antarctic Treaty. It is particularly meaningful for members in states outside the Antarctic Treaty System – as well as various additional requirements on such matters as the qualifications and experience of the expedition staff, and the numbers of visitors allowed to make landings in the Antarctic. By using the qualitative method, this paper argues that though in addition to the bylaws,

there are specific guidelines for tour operators and visitors, for example, the Marine Wildlife Watching Guidelines, Tour Operator Guidelines for Shipborne Operations, Guidelines for Operators of Aircraft and Land-based Private-sector Travel to and within the Antarctic Interior, IAATO Visitor Guidelines, Guidelines of Conduct for Antarctica Visitors and Guidelines of Conduct for Antarctica Tour Operators, there is an increasing number of consultative parties who question whether the Antarctic environment can be adequately protected through these guidelines. The paper reveals the reasons underlying the poor governance of the guidelines and concludes with suggestions to overcome the problem to ensure the sustainability of Antarctic tourism.

**Keywords:** Antarctica Tourism, Tourism Operators; Environmental Effects; Tourism Guidelines.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 36**  
HTE 004

## **Packaging Development for Promoting Dam Tourism Community**

Sarath Simsiri <sup>1\*</sup> Ratananaphadol Smitinand <sup>2</sup>, Mana Eiambua <sup>3</sup>

<sup>1</sup> Ph.D. candidate, <sup>2</sup> Lecturer., <sup>3</sup> Asst. Prof., School of Tourism and Hospitality, Suan Dusit University, Thailand

sarath308@hotmail.com

At present, various forms of tourism are attractive and popular for tourists. The major component that comes with tourism is shopping. Most of the tourists purchased products which manufactured to show the identity. The study of Product and Packaging factors that Influence on Consumer Purchase Decision aims to study consumers' products demands inclusive of the factors affecting consumer interest and buying decisions and also explores the characteristics of packaging that is consistent with consumer demand and to offer product and packaging design guideline which can attract and make consumer purchasing decisions. The questionnaire used as research tools to collect data, analyses result and describe variables. The study reveals consumers prefer local products for example fabric and apparel, arts and crafts. Fine-looking packages which reasonable price and can use as a souvenir are the factors affecting consumer interest and purchase decisions. Tourists prefer geometric shape packaging which perforated to view the product inside. Manufactured from a matte finish material, use any colour that blends in with the fresh colour tones of the same colour. These

are the key factors of product design and packaging to attract attention and make purchasing decisions. Thus, this could benefit to design and develop products to meet the needs of consumers.

**Keywords:** Packaging; Purchasing decisions; Tourism; Ratchaprapa Dam

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 37**  
HTE 005

## **States' Wildlife Tourism Policy Prepares Tourists for Sustainability of Antarctica Tourism?**

Nuraisyah Chua Abdullah\*, Rohani Mohd Shah

*Faculty of Law,  
Universiti Teknologi MARA (UiTM), 40450 Shah Alam, Selangor, Malaysia*

nuraisyahc@yahoo.com, nuraisyah@salam.uitm.edu.my

Wildlife tourism can be broadly defined as trips to destinations with the primary purpose of visits being to observe the local fauna. Although many resolutions and measures for the protection of Antarctica and its fauna and flora are in place, however, the fact that Antarctica is neither sovereign, semi-sovereign nor quasi-sovereign, legal actions could not be taken by Antarctica against a tourist (offender) as a state. According to the United Nations Environment Programme Report, the 50% reduction in the Adelle penguin's breeding population over a six-year period was attributable to stress from repeated tourist visits. The recognition of animals as a human being capable of feeling and the importance of animal welfare is reflected when some nations, i.e. Germany, India, and Ecuador include recognition of animals in their national constitutions. Some existing codes and conventions serve as guidelines to tourists' and operators' behaviours about the use of animals during visitor interactions. Those include the for example, the Global Code of Ethics for Tourism (GCET), Universal Declaration on Animal Welfare (UDAW), World Association of Zoos and Aquariums (WAZA) Code of Ethics and Animal Welfare. However, many studies continue to portray that many tourists are ignorant of the fact that wildlife attraction cause harm to the animals. Hence, this raises the issue as to whether the existing states' policies on wildlife prepare tourists for

sustainable tourism in the state and more delicate destinations like the Antarctic. This paper uses Malaysia as a case study and focuses on the development of the Wildlife Conservation Act 2010 which replaces the Malaysian Wildlife Protection Act 1972 and Wildlife Conservation (Operation of Zoo) Regulations 2012. This paper concludes that although the Wildlife Conservation Act 2010 improves the condition of animals in the Malaysian wildlife tourism, however, there is still weakness in the existing legal framework and is far from preparing tourists for sustainable tourism in vulnerable tourism sites like the Antarctic.

**Keywords:** Wildlife Policies; Wildlife Tourism; Sustainable Tourism; legal framework

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

# **Landscaping Environment**



*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

**A 38**  
LaE 001

## **Boosting Quality of Life through Tree Care: Addressing Tree Vandalism in Urban Setting**

Helmi Hamzah <sup>1\*</sup>, Noriah Othman <sup>2</sup>,  
Nur Huzeima Mohd Hussain <sup>3</sup>

<sup>1,3</sup> *Department of Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA Cawangan Perak, Malaysia,* <sup>2</sup> *Centre of Studies for Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA Kampus Puncak Alam, Malaysia*

helmi692@perak.uitm.edu.my

Tree vandalism has received little scholarly attention and unexpectedly is a muted presence in the tree care guidelines in Malaysia. *Tree vandalism* generally can be defined as the purposeful and illegal destruction of trees including by poisoning, felling and over-pruning. Intentional tree vandalism can be referred to as intentionally destroy or injure trees after they are planted. Thus intentional tree vandalism can occur in two primary forms, the first form is known as opportunistic such as snapping side branches, breaking off crowns and uprooting whereas the second form is premeditated vandalism which involves ring barking (using knives & chisels), drilling, sawing off branches or crowns of young trees and also poisoning the tree roots. On the other hand, unintentional tree vandalism can be caused when the trees are unintentionally injured, for example in downtown planting sites such as in a sidewalk cut out where many people regularly walk close to the tree. The dearth of research in the intentional and unintentional tree vandalism is the reason why this research is pertinent in ensuring effectiveness in urban tree care. This study seeks to narrow this gap by making practical suggestions in the intentional and

unintentional tree vandalism incidence for future urban tree care monitoring. Data will be derived from quantitative and qualitative data. The questionnaire will be distributed to the Malaysian tree care experts. A photographic method comprising various tree vandalism situations will be shown to certified arborists for their interpretation of types of tree vandalism. The results will indicate relevant information about the tree vandalism incidence in intentional and unintentional circumstances. The outcome of this study will be the guideline of a tree vandalism obstruction initiatives in which can boost quality of life through a tree care monitoring activities that integrate specific types of tree vandalism knowledge.

**Keywords:** Certified Arborist; Intentional and Unintentional; Tree Care; Tree Vandalism.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 39**  
LaE 002

## **Choosing Tree for Urban Fabric: Role of landscape architect**

Ramly Hasan<sup>1\*</sup>, Noriah Othman <sup>2</sup>, Faridah Ismail <sup>3</sup>

*<sup>1</sup>Post Graduate Studies, <sup>2</sup> Centre of Studies for Landscape Architecture, <sup>3</sup> Centre of Postgraduate Studies, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia*

ramlyhasan80@yahoo.com

A healthy tree begins with careful planning plus good tree care starts before the tree planting. One of the factors that influence the health of a tree is ensuring that proper tree species are planted in an appropriate location. Planting with fast-growing trees and in the wrong species in roadside are detrimental to health of a tree and can result in higher maintenance costs and threatening the public safety. So many roadside trees are removed because of the wrong tree species in wrong place. Highly public complaints at local authorities regarding street tree problems are very worrying nowadays. Because of that, proper planting with right tree species can help avoid unnecessary tree conflicts down the main road. This research investigates the keys of selection roadside tree species among landscape practices in selected local authorities in Klang Valley. Two objectives of this study are (i) to examine the process of selection roadside tree species among the practices (ii) to analyze the relationship of process selection with types of street tree problems. This research used mixed method approach which based on data collected from in-depth interviews and questionnaires survey. Data analyses are analyzed in Statistical Package for the Social Sciences tool (SPSS). A set of structured interview questions was asked in four local authorities; Kuala

Lumpur City Hall, Petaling Jaya City Council, Subang Jaya Municipal Council and Selayang Municipal Council. Senior Landscape architect in each local authority is selected based on the knowledgeable and their working experiences. The results were given an order which means that most often mentioned codes were first presented followed by less often mentioned. The questionnaire for assessing experts' opinion for selection street trees species in the main road was divided into five sections. The respondents are 289 register landscape architects. The results show the five important codes during the process of selection street tree species which is trending, decision maker, theme, availability, landscape policies have the relationship with street tree problems such as fallen tree, little branches, root problems and leaning trees. The outcomes of this research will help the landscape architects to make a right tree species in roadside areas.

**Keywords:** Right tree; urban fabric; roadside tree species; healthy tree.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 40**  
LaE 003

## **The Components of Social Dimension for Community Gardens in Residential Areas**

Shafa Marzidah Abdullah Ayeop<sup>1</sup>, Halmi Zainol<sup>2</sup>,  
Nur Huzeima Mohd Hussain<sup>3</sup>

<sup>1</sup> Centre of Postgraduate Studies, <sup>2</sup> Department of Town and Regional Planning, <sup>3</sup> Department of Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Seri Iskandar Campus, Seri Iskandar, 32610, Perak, Malaysia.

shafaayeop@gmail.com

Community gardens in urban neighbourhoods have experienced some issues such as lack of awareness and knowledge, lack of interest and commitment among community involvement. Community garden has a great potential to improve social interaction to support sustainable development. It offers wide range of benefits to communities in urban neighbourhood encompassing better health, enhance security and safety, improve social interaction and cohesion among community, build sense of belonging, provide leisure and recreation activity and provide more political activities for community. Sustainable development depends on social dimensions to address the various issues of society through the best approach to achieve the goal. This paper aims to give a better understanding relationship between social dimension and community garden implementation to improve community life in order to support sustainable development. The objectives of this paper are to identify the social dimension elements of sustainable development and to explore the benefits from community garden implementation towards social dimension. This paper analyses established references through previous

articles and theses in order to identify the relationship between social dimension and community garden. The research has found the social interaction, safety and sense of belonging among the benefits of community gardens in social context in housing residential.

**Keywords:** Community Gardening; Social Dimension; Gardening Benefits, Social Sustainable.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 41**  
LaE 004

## **Theoretical Framework for Trees Management in Landscape Design**

Ramly Hasan<sup>1\*</sup>, Nor Diana Aziz<sup>2</sup>,  
Abdul Hadi Nawawi<sup>3</sup>, Ghazali Mohd Amin<sup>4</sup>

<sup>1,2</sup>Post Graduate Studies, <sup>3</sup> Centre of Postgraduate Studies, <sup>4</sup> Centre of Building  
Surveying Studies, Faculty of Architecture, Planning and Surveying, Universiti  
Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia

ramlyhasan80@yahoo.com

This study propose a theoretical framework for trees management in campus landscape design. A case study is Universiti Teknologi MARA, (UiTM) campus Shah Alam, Malaysia. Good tree management is the key basis for greener campus of the future. Healthy trees on campus will influence the quality of student's life. However, lacking in tree management in term of knowledge is one of the factors that trees will produce hazards to the students, staffs and the properties values at the campus. Also, the climate change cause the fallen tree occurs suddenly. Trees in campus face a severe limitation of plantable space and an exceptionally stressful growing environment. Indeed, the theoretical framework for trees management developed to be acting as the parameter to evaluate the user comfort and the safety landscape. Thus, this study drives to prevent the future landscape design that less of pay attention to user comfort caused by trees hazardous aspect. Therefore, two objectives of this study are (i) to determine the user comfort attributes that significantly influent the safety landscape and (ii) to create the theoretical framework for tree management in campus design. The qualitative method was chosen in this study whereby five experts respondent in the study



area was selected based on the experience with hazard trees and agree to share the experiences. Therefore, the Atlas.ti software employed to determine the user comfort factors and attributes that significantly influence with safety landscape. This results of this study revealed that three comfort attributes are needed to reach the safety in campus landscape design namely, belief, attitude and behaviour. This study provides the guidance for the landscape architect to make the right design decision to ensure the user comfortability for safety built landscape environment.

**Keywords:** Theoretical framework; tree management; campus design; comfort

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 42**  
**LaE 005**

## **Vegetation Design as User's Thermal Modifier at Urban Park**

Sharifah Khalizah Syed Othman Thani<sup>1\*</sup>, Nor Hanisah Mohd Hashim<sup>2</sup>, Nik Hanita Nik Mohamad<sup>3</sup>, Syed Abdul Mutalib Al Junid Syed Abdul Rahman<sup>4</sup>

*<sup>1,3</sup> Centre of Studies for Landscape Architecture, Faculty of Architecture, Planning and Surveying, 42300 Universiti Teknologi MARA, Kampus Puncak Alam, Bandar Puncak Alam, Selangor, Malaysia. <sup>2</sup> Centre of Studies for Park and Amenities Management, Faculty of Architecture, Planning and Surveying., <sup>4</sup> Centre of Studies for Electrical & Electronic Engineering, Faculty of Electrical Engineering, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia*

khalizah81@gmail.com

Among the challenges we face in the 21st century is to make the city more resilient to future climate change. There is an urgent need to tackle issues like Urban Heat Island (UHI), heat stress and outdoor discomfort to ensure the habitability of the city, and to enhance the quality of life to the inhabitants. Imposing more green network and infrastructure could help in improving the urban thermal environment, and promote outdoor comfort to the dwellers. Vegetation plays a significant role in modifying urban temperature where it serves as passive tools to reduce solar radiation and lower ambience temperature. The study aims to investigate the potential of vegetation design as a microclimatic modifier at KLCC park. The scope of study is to determine the impact of vegetation types such as trees, shrubs and groundcovers towards thermal comfort. The different morphological characteristics of trees, shrubs and groundcover, and its planting configurations could be best indicator to determine the outdoor thermal comfort among users at KLCC Park. The study involved both

qualitative and quantitative methodology where it is divided into two different observations. First, the study observed the vegetation design and its microclimatic effects through field measurements. Second, the study found the influence of vegetation design to user's comfort through secondary data obtained from another researcher that conduct a similar survey at KLCC Park. The results of both observations and ground measurements were then analysed thoroughly to get the empirical findings for this study. For ground measurements, 15 sampling stations were identified within KLCC Park that comprises of different urban park typologies and vegetation characteristics. For determining the user's thermal comfort, the researcher has selected eight sampling points with varying layers of vegetation around the KLCC Park. The perception of user's thermal comfort among 30 respondents was obtained through guided interview and questionnaire survey. The results indicate the sampling points with various types of vegetation including hardy canopied trees, dense shrubs and groundcovers recorded lowest air temperature, and more visitors were comfortable doing activities in that area compared to points with fewer layers of vegetation. The findings suggest a preliminary strategy to design with plants in improving urban microclimate. Thermal comfort is a necessary element for an individual to sitting outside which gives influence to the outdoor activities. Therefore, to secure social sustainability in future, the aspects of environmental resilience should be taken proactively from time to time.

**Keywords:** Planting design; vegetative cooling; user's thermal comfort; urban public park.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

# **Legal Matters**

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

**A 43**  
**LM 001**

## **Law and Policy Interventions to Advance the Community's Quality of Life**

Rohani Mohd Shah<sup>1\*</sup>, Rohazar Wati Zuallcoble<sup>1</sup>,  
Ahmad Ismail Illman Razali<sup>2</sup>

<sup>1</sup>*Faculty of law, Universiti Teknologi MARA, Malaysia.*

<sup>2</sup>*Malaysia Competition Commission (MyCC), Malaysia*

rohanimohdshah@salam.uitm.edu.my

People have always developed visions to improve their lives, to a better quality of life, ever since. To gradually move towards these visions is what is typically considered to be a progress. The idea of humanity being in a continuous state of progress gained particular momentum in every responsible Government. Nevertheless, if government must assure the conditions for the upgrade progress of better quality of life of its communities, then, what tools are available to accomplish that task? Laws, regulations and policy are their tools. Government can intervene at a variety of community's level, with each strategy designed to secure safer behaviour among the community or regulate individual behaviour, or create agents of behaviour change, and reduce the rate of deteriorating environment. Hence, to deliver an effective strategy, the role of legislation and policy in development should be determined by multidisciplinary indicators, because no single ministry or profession alone has enough perspective on development. The interventions should be global and mindful of future realities. Among major current legislative frameworks are those relating to environmental permitting, and those mandating environment and health impact assessments. The policy may also intervene to allow public to have better quality of life from health perspective. Legislation is an essential instrument in the control of

environmental hazards to health and has been used from the earliest days of public health, for example in the control of water quality and sanitation in the 19th century, and in various forms of air quality legislation in the 20th century. This article examines how law can influence community to progress and achieve better quality of life and development planning policy suitable in Asian region. Since the indicators recommended by scholars are too many, this article will focus on area of community public health and safety. The presumption is that state has the legal powers and duties to assure the conditions for the community to be healthy and the limits on that power to constrain the liberty or property of individuals or community for protection or promotion of community health. Therefore, discussion will focus on tax incentives or disincentives for changing behaviour, informational awareness campaign, direct regulations including penalties, the tort system and deregulation in particular community behaviour. Despite its importance, legal interventions rarely subjected to rigorous research evaluation. Unfortunately, the finding is difficult to demonstrate a causal relationship between the intervention and the observed health effect scientifically.

Keywords: progress, quality of life, legislation intervention, policy intervention

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 44**  
**LM 002**

## **Role of Legislation in Sustaining Environment Change and Creating a Better Quality of Life for Global Community**

Rohani Mohd Shah <sup>1\*</sup>, Nuraisyah Chua Abdullah <sup>1</sup>,  
Hamisah Abd. Rahman<sup>2</sup>, Zaliha Husin<sup>3</sup>

*<sup>1</sup>Faculty of Law, <sup>2</sup>Faculty of Business Management, <sup>3</sup>Faculty of Administrative  
Science and Policy Studies, Universiti Teknologi MARA, Malaysia*

rohanimohdshah@salam.uitm.edu.my

The role of legislation has always been misunderstood. Whenever there is legislation, the universal public perspective will be that it is connected and related to punishment, sanction and long and unclear sentences. Scientist and built environment specialists rejected legislation more as unable to understand and fail to capture the true meaning of quality of life and sustaining environmental. Law is protecting the public's want and the management's hope. Law in built environment and global change is about control and manage the quality and standard. The role of legislation about sustaining environmental change and creating a better quality of life for global community also secure the same for the future generation. The built management study has this as their central issue for decades, not only for disciplines involved in the creation of the built environment and the management of the natural environment but more importantly of the impact upon the global communities, due to the growing pressures of development, yet their debates continues, endlessly. The built environment management need an assistant. It comes in the form of the code of ethics, interpreting, what is "quality". What should be the appropriate and right interpretation, of quality, if measure from the existing



communities, definitely it varies, between society or wealth? If no legislation to sustain the same meaning especially in the Asian communities how does the behaviour can be condoned? Hence, one role of legislation is maintaining fairness, in a community. The good law, will engulfed all improvement of society, the subjective interpretation, the different communities, and different experiences of developing regions in understanding causes of deteriorating quality, particularly in rapidly growing Asian communities. However, in Antarctica, no human activities, still changes and deterioration of environment does take place, but in small scale of changes, it is not the nature, that works but the law that is effective, the Antarctica Treaty System. Therefore, this article aims to educate reader the importance of legislation as partner to the built environment. Comparing legislations from 4 different region, China, Netherlands, Argentina, Malaysia, analysing how legislating the rights Code of Ethics to the "quality" concept able to response to sustaining their built environmental design, should be the finding of this article. Perhaps, the implication of not having a legal interpretation of "quality" can be a persuasive reasoning for built environment specialists, to accept the role of legislation as their partner in creating a better quality of life.

**Keywords:** legislation; quality of life; built environment; Antarctica.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 45**  
**LM 003**

## **Science Diplomacy Transcend National Boundaries to Promote Greater Global Peace, Prosperity and Stability**

Rohani Mohd Shah\*, Nuraisyah Chua Abdullah

*1Faculty of Law, 2Faculty of Business Management, 3Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA, Malaysia*

rohanimohdshah@salam.uitm.edu.my

In December 2015, Malaysia adopted the first-ever universal, legally binding global climate deal through the Paris Climate Conference (COP21) under the United Nations Framework Convention on Climate Change (UNFCCC). Almost the entire world reached a consensus to tackle a global issue. This consensus is only possible with the concept of science diplomacy. Today, science plays a vital role in international policy-making and diplomacy. Science facilitates a confluence of ideas, knowledge, expertise and resources that transcend national boundaries and traditional disciplines towards efficiently addressing related global problems. Science should be leveraged to facilitate effective knowledge-based international partnerships to address common problems faced by humanity. The UK Royal Society has defined three categories of science diplomacy to reflect its various applications at the domestic, bilateral and multilateral levels. The first category is science in diplomacy, which is informing foreign policy objectives with scientific advice. The second category is diplomacy for science, which involves the facilitation of international scientific cooperation. The third category is science for diplomacy, which is the use of scientific cooperation to improve relations between countries. However, there are invisible walls that exist among us and through science

diplomacy, we can bridge the world towards solving global problems. Science diplomacy transcends borders, politics, culture and religion where all accept the universality of science. It is the use of international scientific cooperation to foster communication and cooperation among the peoples of diverse nations and to promote greater global peace, prosperity and stability. One of the successful global treaty that Malaysia has given ascend to is the Antarctica Treaty 1959. The Treaty has been successful in preserving it as a place for peace and science. So how does Malaysia use science diplomacy from foreign countries at the local level before applying our science diplomacy to the international or global level? Could this Treaty, through the science diplomacy prove that it can tackle economic issues of Asian region? This article aims at the legislative limitation of transforming international science diplomacy into the local system especially in solving issues concerning economy. The Malaysian Federal Constitution, Limitation Act 1957 and the Civil Law Act 1956 will be examined. Discussion will include expectations for obligations and compliance to the treaty. Findings shows that the Treaty is a successful tool in promoting diplomacy in all categories. The achievement in transformation of science diplomacy from Antarctica are crucial as it can help Malaysia to connect globally.

**Keywords:** science diplomacy; Malaysia; Antarctica; sustainable economy.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

# **Local Heritage Environment**

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

**A 46**  
LHE 001

## **Ascertaining the Economic Sustainability of Heritage Property Market based on Sales Transaction Analysis**

Normayuni Mat Zin\*, Suriatini Ismail, Fatin Afiqah Md. Azmi

*Faculty of Architecture and Ekistics,  
Universiti Malaysia Kelantan, Malaysia*

mayunimatzin@gmail.com

The economic dimension of sustainable development emphasises the need to improve the quality of life for all citizens in income and profit-generating as well as for the community well-being. Heritage property from the historic designation and preservation perspective has been widely recognised in promoting economic sustainability from its property values. This paper presents the analysis of heritage property sale transactions data for the purpose of ascertaining the state of economic sustainability. Heritage property market analysis was conducted by referring to the sale transaction volumes in Annual Property Market Report published by Malaysian Valuation and Property Services Department and the sale transactions data of heritage property that were collected from the Malaysian Valuation and Property Services Department, Putrajaya and Kuala Terengganu Branches for a period of 15 years from 2003 to a half year of 2017. The study areas comprise four historic cities in Malaysia i.e. George Town, Malacca City, Kota Bharu and Kuala Terengganu. The sale transactions data were analysed quantitatively using descriptive statistics comprising the mean, minimum and maximum values of its prices. The finding shows that for the period 2003 till 2017, George Town in Penang recorded the highest transaction number and value per square foot as compared to other cities in Malacca, Kelantan and Terengganu. Based on

the increasing number of annual heritage property sales transaction and trend of price movement, it can be concluded that the heritage cities considered in this study recorded an increase in their heritage property values. This study provides empirical evidence of increases in sale transactions and heritage property values. This suggests that the heritage property markets in the four study areas are sustainable. Theoretically, this study supports past literature in terms of the importance and contribution of heritage property towards economic sustainability. Practically, it also serves as useful tool for policy makers and government bodies in assessing the performance of economic sustainability generated by the heritage property, as well as a benchmark to monitor equity investment for investors.

**Keywords:** Economic sustainability, heritage, market analysis, property value.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 47**  
LHE 003

## **Confusion in Design and Facilities of Layout Plan (GMP Requirements) Among Industries, Consultants and Authorities**

Mohd Bakri Jali<sup>1\*</sup>, Maaruf Abdul Ghani<sup>2</sup>, Norazmir Md Nor<sup>3</sup>

<sup>1</sup>*SIRIM Training Services, Malaysia.* <sup>2</sup>*School of Food Technology and Chemical Science, Faculty of Science and technology, UKM, Malaysia.* <sup>3</sup>*Nutrition Departments, Faculty of Health Sciences, UiTM, Malaysia*

mbakri@sirim.my

The effectiveness of the food safety system is influenced by design and facilities layout. Design and facilities are the first element in GMP. GMP is a universal step to ensure safe operations in production of food. From the previous literature, there were problems reported regarding the practice of GMP in the industries. The most reported were cross contamination, inadequate infrastructures, error in design and facilities and etc. Previous studies have given more attention to industries as a respondent. However, this study is designed to go in-depth into consultant and authorities as well. Despite, there were research conducted on an error in design and facilities, but there was limited research on the design and facilities. Hence, the purpose of this study is to identify the confusion over design and facilities requirement in food premise on GMP MS 1514:2009 requirements among industries, consultants and authorities. Among the aspects discussed regarding design and facilities are location, design and layout, floors, walls, doors and windows. Although the research aspects were not comprehensive, it will give a clear picture on the practice of design and facilities. The methodology used is through questionnaires involving 96 respondents and respectively 32 from each group. The



confusions are grouped into low, medium and high based on the method established. The level of confusions determined based on percentage of responding from the respondent. The results showed, there were confusions in the requirements of design and facilities regarding location, design and layout, floors, walls, doors and windows. From the finding, the results showed five low confusions and three medium confusions, but there was no high confusion identified. The authorities became the highest contributor over the confusion of design and facilities. In conclusion, there were significant confusions in meeting the requirements of the design and facilities among industries, consultants and authorities. The confusion occurs the level of hygiene and food safety as well as harm the consumers.

**Keywords:** Food safety system; GMP; HACCP.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 48**  
LHE 004

## **Construction Techniques of Traditional Malay Houses**

Khairul Fikri Khairudin, Nurul Hamiruddin Salleh, Srazali Aripin

*Department of Architecture, Kulliyah of Architecture and Environmental Design,  
International Islamic University Malaysia, Malaysia*

khairul.fikri.khairudin@gmail.com

*Rumah Kutai* in Perak is the oldest surviving traditional Malay house and is gradually disappearing from the indigenous cultural landscape of Malaysia (Ariffin & Talib, 2004). Therefrom, it is crucial to preserve such precious Malay heritage especially on the unique construction methods for the next generation references. The subject of the research is construction techniques of the traditional Malay houses which is emphasized on the indigenous house of Perak, *Rumah Kutai*. This research, basically exploring on how *Rumah Kutai* is being constructed from the beginning until the end. Also, to examine the construction techniques especially on the jointing system (*tanggam*) of several components in *Rumah Kutai*. The research aims to study the construction techniques of traditional *Rumah Kutai*. There are three objectives highlighted for the research which are to understand the sequence and chronological process of erecting *Rumah Kutai*; to identify the method of construction apply for *Rumah Kutai*; to document the complete construction method apply for *Rumah Kutai* for future reference and preservation. In order to achieve the desired results, the research is conducted with a guided methodology and theories. By establishing methodology framework, the approach is to identify the three types of *Rumah Kutai* which is selected for the case studies and the fieldworks stage. This is achieved by examine and investigate on the jointing system and the detailing of the construction. Plus, to validate the

findings, semi structured interview is conducted with the selected people. The last step would be the documentation process. This documentation will be a guidance for the future generations to refer to. This is the way to sustain the used or acknowledge the existence of *tanggam* to people (Sabil & Utaberta, 2011). Generally, the documentation of these construction techniques will somehow promote the understanding and appreciation of traditional Malay houses, individually and collectively (Çelik, 2009). It will also help to preserve the Malay Architectural legacy from time to time.

Keywords: *Kutai*; Traditional Malay house; Construction techniques; *Tanggam*.

ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia

**A 49**  
LHE 005

## **Developing an Adaptive Reuse Model for Organization Management in Conservation of Heritage Building**

Mohd Hanizun Hanafi\*, Mohd Umzarulazijo Umar,  
Arman Abdul Razak, Zul Zakiyudin A.Rashid

*School of Housing, Building and Planning,  
University Science Malaysia, Malaysia*

hanizun@usm.my

The primary purpose of this paper is to explore, review and confirm the keys factors that have enormous impact and influence on the conservation of heritage building in Malaysia, with a focus on developing adaptive reuse (AR) model as a strategic decision-making tool to enhance the performance of organisation for authority and the private sector. These papers enlighten the significant finding from the excessive literature review within the trustworthy sources. Factors influence in heritage building being set accordingly to bridge the gap and tighten up the common understanding of the major player of the heritage building. Factors weight revealed namely physical, economic, social, environment, politic, law and regulation, finance, technology, infrastructure, and function. Quantitative research with Inference study method used to guide the process of dealing with factors influence, population and sampling approach. A group of experts, namely professionals and the experience contractors is the major contributor or respondent to confirm the factor influence indication. Sampling survey method with the Likert-scale approach used to gather all necessary information namely respondent background, academic background, experience and overview to the main questionnaire which is factors influence. Non Parametric test and descriptive analysis used to

analyse group differences and correlation between the collected data. Cronbach-Alfa and Split Half Model use to measures the internal consistency involving correlation value for each score in study item statistically will validate the research outcomes.

**Keywords:** Adaptive Reuse Model, Heritage building.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 50**  
LHE 006

## **A review on Decision-making Models and Tools in Developed Countries towards Enhancing Sustainable Built Heritage Assets in Developing Countries**

Salim Bashir Umar, Ismail Said

*Department of Landscape Architecture, Faculty of Built Environment,  
Universiti Teknologi Malaysia, Malaysia*

Sbumar81@gmail.com

Contemporarily, adaptive reuse is the prominent strategy that intervenes new sustainable functions into existing buildings by changing the original use, thereby regenerating them to future generation. The strategy has become a fast-growing phenomenon in developing countries, meanwhile preserving the effort, skill and dedication works implemented by the original builders that worked on the historic buildings. Hence, the buildings deserved to be conserved and reused with optimum decision-making to enhance the effective operational performance. However, adaptive reuse decision-making comprises a complex set of consideration, including unresolved identified factors, point of references and justification, location, and architectural assets. In addition, there is scarcity of papers written on adaptive reuse of heritage buildings in Nigeria and other developing countries, meanwhile the abandonment and reuse of these building is ongoing. Hence, this paper is aimed at investigating a thorough assessment of adaptive reuse decision-making models and tools implemented in the developing countries. The objective of this study is to review journal articles and book chapters related to adaptive reuse decision-making and heritage buildings. Followed by evaluating the decision-making models and tools implemented in adaptive reuse

projects. Sum of 50 journal articles from 1999 to 2017 and 10 book chapters were reviewed. The articles and books were sourced from Web of Science, Science Direct, and Google Scholar. Subsequently, 3 models profound by different authors in 2008, 2011 and 2013 were examined. The first model is Adaptive Reuse Potential Model known as ARP model. It determines the potential of a building by estimating useful life based on obsolescence criteria. The second model is Adaptive Reuse Decision-Making Model that provides reference point, resolves real-life dilemma and issues facing practitioners. Lastly, the adaptSTAR Model that assesses the potential of future buildings embedding them with design criteria. Moreover, 3 tools were also generated which include Multi-criteria Decision Analysis-MCDA, Multi-attribute Value Theory-MAVT as they address problems involved in conflicting objectives. Then Life Cycle Assessment tool- LCA, that assist in understanding the potential benefits and environmental impact of an adaptive reuse project. The developed models and tools paves multiple-options of decision-making to relevant actors, having an overview of past study and way forward to present and project for the future adaptive reuse projects. On the whole, this give researchers an avenue to update and propose new models and tools as the generation is inclining towards technological advancement of buildings.

**Keywords:** Adaptive reuse, Decision-making, Sustainability, Built Heritage.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 51**  
LHE 007

## **Improving Thermal Comfort through the Choice of Available Building Materials in the Tropical Region of Nigerian: A Review**

Abdulkarim Kabiru Haruna<sup>1\*</sup>, Ismail Said<sup>2</sup>

<sup>1</sup> *Department of Architecture, Faculty of Built Environment, Universiti Teknologi Malaysia, Johor Bahru Malaysia,* <sup>2</sup> *Department of Landscape Architecture, Faculty of Built Environment, Universiti Teknologi Malaysia, Johor Bahru Malaysia*

kabir2yk@yahoo.com

Thermal comfort can be seen as that situation whereby human mind is fully satisfied with the state and condition of its thermal environment. For this reason, human thermal comfort becomes a challenge in the provision of reliable and conducive living environment. Furthermore, it remains a leading phenomenon in the built environment in terms proposal, planning and execution process of indoor and outdoor environments. Tropical climate in Nigeria is identified with hot weather, wet summer, high humidity, and little diurnal change in temperature. North-eastern region of Nigeria is the most affected environment with a higher percentage of thermal dissatisfaction due to an excessive rise in temperature and solar radiation. Consequently, this made it difficult for the region to achieve the maximum level of human thermal comfort. Thus, the aim of this paper is to review the role of different available building materials and resources in improving thermal comfort of the occupants in the region, building material will be reviewed to know their characteristics and application into practice to improve the human thermal comfort. Accordingly, 60 journal articles and book chapters in the field of architecture, landscape architecture, human geography, environmental science, renewable and sustainable energy,



engineering science, urban and regional planning, environmental psychology and Humanity from the year 2010 to 2017 were reviewed and illustrated through tables, matrices and figures. Hence, knowledge and ideas were drawn from the reviewed works of literature with regard to selection and application of building materials in order to overcome the negative effects of air velocity, air temperature, radiant temperature and the humidity. Consequently, it is deduced that much use of concrete material rises the degree of indoor radiant temperature through convection, and radiation. Secondly, vertical glasses and glass curtain walls reflect solar radiation to the outdoor pedestrian. Thirdly, application of black paints absorb heat energy and emit such to the occupants through conduction, convection and radiation thus, increase their skin temperature. As a result of these, higher percentages of indoor and outdoor users find it tedious to meet up with their do-to-day activities. In conclusion, further study is required to go deep into identifying local building materials available in Nigeria in order to adapt and use them in an improved and modern way.

**Keywords:** Thermal Comfort; Building Materials; Tropical Region of Nigeria; Literature review.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 52**  
LHE 008

## **Preserving the Characteristics of Urban Heritage**

Noor Aimran Samsudin<sup>1\*</sup>, Muhamad Solehin Fitry Rosley<sup>2</sup>, Raja Nafida Raja Shahminan<sup>3</sup>, Sapura Mohamad<sup>4</sup>

*<sup>1</sup> Senior Lecturer, Department of Urban and Regional Planning, Faculty of Built Environment, Universiti Teknologi Malaysia, Malaysia. <sup>2</sup> PhD Candidates, Landscape Department, Faculty of Social Sciences, the University of Sheffield, United Kingdom. <sup>3</sup> Director, Centre for the Study of Built Environment in the Malay World (KALAM), <sup>4</sup> Senior Lecturer, Department of Landscape Architecture, Faculty of Built Environment, Universiti Teknologi Malaysia, Malaysia*

nooraimran@utm.my

Royal towns in Malaysia are the finest examples of traditional Malay towns which are strongly associated with the long history of Malay Sultanates in Malaysia. Malaysia is home for nine different Malay royal houses, and each of them has its own distinctive royal seats known as a Royal Town. These Malay monarchs' royal towns respectively are located in Arau (Perlis), Anak Bukit (Kedah), Kuala Kangsar (Perak), Klang (Selangor), Seri Menanti (Negeri Sembilan), Muar (Johor), Pekan (Pahang), Kuala Terengganu (Terengganu) and Kota Bharu (Kelantan). Therefore, this study aims to identify the significant characteristics that perhaps homogeneously shared by these royal towns to be inferred as the symbol and identity of the place. The study begins with thorough literature reviews of historical Malay manuscripts for some insights into how the traditional Malay towns were during the early 14<sup>th</sup> to 19<sup>th</sup> century. This is followed by several site visits to the listed Malaysian royal towns for a preparation of the next comparative case studies. From this, the study managed to identify three prominent characteristics that shaped the whole physical image of Malaysian royal towns. These characteristics are known as the

king's palace, traditional Malay settlements known as kampongs and lastly, the traditional fortress or citadel. Nevertheless, these characteristics are being threatened due to improper planning and modernization of the royal towns. A conventional conservation approach, however, seems insufficient to address the whole idea of a Malaysian royal town. These identified characteristics, in this case, are interrelated and thus required a new comprehensive, in-depth method of conservation and preservation in order to sustain the image of the place as a cradle of Malay civilization. The royal towns hold a diversity of cultures and historical values, which need to be treasured as part of our Malay sultanates' heritage, local cultures and foremost as our national identities.

**Keywords:** Royal towns, Urban heritage, Traditional Malay towns.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 53**  
LHE 009

## **Urban Public Space Revitalisation Strategies**

Dasimah Omar <sup>1\*</sup>, Maimunah Ramlee <sup>2</sup>,  
Rozyah Mohd Yunus <sup>3</sup>, Zalina Samadi <sup>4</sup>

*<sup>1</sup>Centre of Studies for Town and Regional Planning, Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA Kampus Puncak Alam, Selangor, Malaysia, <sup>2</sup>Centre of Studies for Postgraduate Studies, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA Shah Alam, Malaysia,, <sup>3</sup>Centre of Studies for Architecture, Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA Kampus Puncak Alam, Selangor, Malaysia, <sup>4</sup>Centre of Studies for Architecture, Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA Kampus Puncak Alam, Selangor, Malaysia*

dasimaho@yahoo.com

Revitalisation of urban public space is a mechanism to redevelop the public space area in Core Zone, George Town World Heritage Site in accordance with the development growth and population. In addition, the revitalisation of urban public space is essential in meeting the users' needs to create a successful public space. This paper discussed the factors of revitalisation which are related to urban public space in George Town World Heritage Site. The objectives of this paper are to analyse the characteristics of urban public space in heritage site which could effectively be adopted for revitalisation purposes; and through what medium to generate the public space more functional with positive influence on modern urban life. In order to meet the aim, a combination of qualitative and quantitative research method was applied. The qualitative method involved site observation and in-depth interviews. The in-depth interviews involved with five respondents who are the experts in related field of this study. Meanwhile, the quantitative approach was based on

questionnaire survey regarding public spaces' successful factors through the assessments by local residents and tourists. The samples selected for local residents' survey were 400 samples and 100 sample for tourists. The data were analysed to identify and determine the public space characteristics and level of preferences can be contributed towards revitalisation strategies of urban public space in the aspects of planning and management of study area. It is recommended that the revitalisation strategies should be able to revitalise urban public space in core zone, George Town World Heritage Site particularly in physical aspects, suitability and functionality, users' need and comfort at urban public space. The revitalisation strategies are important to assist the local authority in ensuring urban public space is successfully managed. The recommendations of this study can contribute to improve the planning and management of urban public space in George Town World Heritage Site, Pulau Pinang.

**Keywords:** Public space; Urban revitalisation; Revitalisation strategies.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

# **Leisure / Recreational / Sports Environment**

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

**A 54**  
LRSE 001

## **Funding for Effective Maintenance Management of Public Sport Facility**

Nurfarzana Mohd Al Hapiz <sup>1</sup>, Hasnul Faizal Hushin Amri <sup>1</sup>,  
Nor Diana Aziz <sup>2</sup>, Siti Aishah Wahab <sup>1</sup>

<sup>1</sup>Faculty of Sports Science and Recreation, <sup>2</sup>Centre of Postgraduate Studies,  
Faculty of Architecture, Planning and Surveying,  
Universiti Teknologi MARA (UiTM) Shah Alam, Malaysia

nfznmah@gmail.com

The Malaysian public sports facilities designed and planned to the nature and requirements of each game, sport facilities build according to the rules as outlined by international game. However, the public sports are mainly in unsatisfactory condition and not well maintained. Indeed, in order to meet the National Sport Policy's aspirations to form a sporting nation and a healthy lifestyle to the community, the maintenance management of sport facilities is crucial aspect in maintaining the value and function of a sport facility. Meanwhile, the high cost of maintenance management seems one of the barriers of effective sport facility maintenance management. Also, it is well noticed that to get the funding is a challenging task for the community-based facilities management (CBFM). Thus, the aim of this study is to provide the appropriate source of funding for effective public sport facility maintenance management. Therefore, the first objective of the study is to determine the funding source attributes that significantly with the effective of sport facility. While, the second objective is to determine the handling and operational cost that effecting the effective maintenance management. Thus, the study adopted the ethnographic study to reveal five (5) perception from experts in managing sport facility. The experts were questioned using the interview instrument



to get the feedback of the resource funding for effective maintenance management. The study found that three construct directly have relationship with effective management namely government and donation, fee and return on investment. The handling and operational cost also found that moderator relationship with the effective maintenance management. In a nutshell, this paper will be useful to researchers, sport facility managers, maintenance professionals and others concerned with maintenance to understand the foundation of maintenance management aspect in of public sport facility. Also, the monetary resources and hidden cost that effects the effective maintenance management discussed in the study.

**Keywords:** Sport facility Malaysia; Public sport facility; Maintenance management; Sport facility maintenance

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 55**  
LRSE 002

## **Nutritional Supplements Consumption among Athletes**

Siti Sabariah Buhari, Nurul Nadhirah Abd Rahman

*Centre of Nutrition & Dietetics, Faculty of Health Sciences, Universiti Teknologi  
MARA Selangor, Puncak Alam Campus, 42300 Puncak Alam, Selangor, Malaysia.*

sabariah6204@puncakalam.uitm.edu.my

Introduction: Nutritional supplement is an additional product that contains one or more ingredients to complete total daily intake of an individual. The popularity of its consumption is increasing from time to time among athletes. This study aims to identify the nutritional supplement consumption pattern among UiTM athletes, to identify the influencing factors of supplement consumption and to compare the intake of supplement between male and female athletes. Methods: A total of 123 UiTM athletes participated in this cross sectional study. Men and women athletes with at least 18 years old were recruited in this study. The participants were asked to complete the questionnaire regarding their use of supplements. Results: It was reported that 30.9% of the participants consumed nutritional supplements, with 27 (71.1%) of them male. The most frequent supplement used by the athletes was multivitamin or mineral supplement. Multivitamin or mineral supplement was commonly consumed by male athletes whereas female athletes would consume both multivitamin or mineral and natural or phytotherapeutic supplement evenly. There is no significant difference in nutritional supplement intake between male and female athletes ( $p > 0.05$ ). Most of the athletes consumed supplement for the purpose of increasing strength or muscle mass (35.8%) and to restore nutrient (24.9%). A majority of the athletes (34.1%) were seeking

information regarding the supplement from the professional guidance and they (52.0%) believed that its consumption has no side effect. Conclusion: It can be concluded that supplement intake among UiTM athletes was not very popular. The supplements are generally prescribed by professionals for the purpose of muscle strength.

**Keywords:** Athletes, Nutritional supplements, college students.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

# **Residential Environment**

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

**A 56**  
**RE 001**

## **House Qualities Characteristics Relationship on House Prices**

**Muhamad Hilmi Mohamad @ Masri<sup>1\*</sup>, Abdul Hadi Nawawi<sup>1</sup>, Edie  
Ezwan Mohd Safian<sup>2</sup>, Ahmad Fawwaz Ahmad Saleh<sup>1</sup>**

*<sup>1</sup>Department of Postgraduate Studies, Faculty of Architecture, Planning and  
Surveying, Universiti Teknologi MARA (UiTM), 40450 Shah Alam, Selangor,  
Malaysia . <sup>2</sup>Universiti Tun Hussein Onn Malaysia, 86400 Batu Pahat, Johor,  
Malaysia*

hilmimasri@gmail.com

The housing qualities were a part of houses characteristics that can contribute towards higher quality of living achieved by occupants. Occupants of houses were familiar with their own houses qualities, but prioritization towards aspects for improvements were needed to be quantified through empirical evidences. The researcher has conducted the problem statements discussion and also literature reviews resulting that house qualities needed to be identified and analysed on the relationship with house prices. Through the help of Analytic Hierarchy Process and Geo-Information System, weightages of houses characteristics qualities can be determined. AHP and GIS helps in the determination of the weightages and facilitates simpler decision making in producing them. These weightages can be subsequently utilized to achieve the aim and objectives of the study. The aim of this study was to come up with significant results of the relationship between house qualities and house prices. The first objective to achieve the aim was to produce the weightage of the house characteristics qualities. As for the second objective, it was to measure significant relationship between house characteristics qualities and houses prices. The methodology involved was through the application

of AHP and conducting Regression Analysis between the characteristics and house prices. For the purpose of this study, areas of ten residential areas were sampled and fifty houses will be measured on its relationship. The residential areas consisting of the ten residential areas were located in the district of Klang, Selangor, and suitable to be represented for houses in the Klang Valley. The houses focused on this study will be mainly on landed houses and utilizes single and double-storey terrace houses. Regression analysis was chosen to analyse the weightages as it can help to produce significant findings for the study. The findings will then contribute towards areas of characteristics qualities needed to be focused in order to help increase quality of life of the house's occupants. The implications projected were that houses offered afterwards can be focused on areas specific to improve whole livelihood of the occupants.

**Keywords:** House Quality; Regression; GIS; AHP.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 57**  
**RE 002**

## **Neighborhood Factors Contributing to the Household Mobility**

Mohd Hanizun Hanafi\*, Afrina Shaheera Mazree,  
Mohd Umzarulazijo Umar, Hakimi Ahmad

*School of Housing, Building and Planning,  
University Science Malaysia, Malaysia*

hanizun@usm.my

It is fundamental for all households have the desire to live in the beautiful neighbourhood with good quality of facilities and the surrounding environment. The decline in neighbourhood quality results in neighbourhood dissatisfaction which contributes the mobility intention among households. This study aims to investigate the mobility intention among families of low and medium income group in Penang and to examine the potential of neighbourhood attributes in improving their lives as well as to cater their needs and comforts by determining the main factors of location as well as social and physical characteristics. The data from the surveys collect with ranking by the calculation of the importance index. Using Important Index (II) analysis, the study found households preferred the safe neighbourhood with less crime rate, enough parking spaces, and good security. Meanwhile, cleanliness and apart from family members shows the higher factors affecting residential mobility in Desa Bayan Apartment. These studies shed light the importance of considering neighbourhood attributes in residential preferences, as well as enlighten the readers on the interrelation between residential mobility and social sustainability. Overall, this study contributes some knowledge on social sustainability by proposing quality neighbourhood in the future by



considering the communities need and preferences. However, findings of this study had limited to investigate the reasons why the renters are moving from one neighbourhood to others; the additional research is needed to provide more understanding on the neighbourhood attachment and the effect on social interaction.

**Keywords:** Residential Mobility, neighbourhood attributes Sustainability and Social Sustainability.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

# **Travel / Transportation Environment**

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

**A 58**  
TTE 001

## **Cognitive Impairment among Young Motorcyclists: A controlled study**

Anila Ali<sup>1,3</sup>, Roslinah Mohamad Hussain<sup>2</sup>

<sup>1</sup>*Department of Environmental Health and Safety, Faculty of Health Sciences,  
Universiti Teknologi MARA, Puncak Alam Campus, Selangor Malaysia,*

<sup>2</sup>*Department of Medical Laboratory Technology, Faculty of Health Sciences,  
Universiti Teknologi MARA, Puncak Alam Campus, Selangor Malaysia,*

<sup>3</sup>*Department of Environmental Management and Policy, Faculty of Engineering,  
Balochistan University of Information Technology, Engineering and Management  
Sciences, Quetta, Pakistan*

anila928@yahoo.com

The motorcycle riders are exposed to high noise levels (>90 dBA) and considered as a risk factor for motorcyclist's health. High noise exposure can impair the cognitive functioning, while, motorcyclist's psychological health profiling not yet defined. The cognitive assessment of young motorcyclists under high-noise exposure has not been investigated previously. Therefore, this study is aimed to determine the effects of noise-induced cognitive function and reaction time among young motorcyclists. A total of 60 (43 men and 17 women) undergraduate University Motorcyclists (age ranging from 19-24 years) participated in the controlled laboratory experiment. Participation of motorcyclists ranged from semester 1-8, with minimum and maximum motorcycle riding experience of 1 to 12 years respectively. The study design consisted of the experimental group (ExG) and controlled group (CoG), recruited with 30 participants in each intervention. The ExG performed the test under noise exposure of background noise of motorcycle (85-90 dBA) and, the CoG under controlled laboratory noise ( $\leq 65$  dBA). The neuropsychological

battery test: Loewenstein Occupational Therapy Cognitive Assessment (LOTCA) was used to measure the cognitive function and reaction time of the participants. LOTCA consisted of six domains: Orientation (O), Visual Perception (VP), Spatial Perception (SP), Motor Praxis (MP), Visual Organization (VO), Thinking Operation (TO). The sound level was monitored simultaneously by Sound Level Meter (SLM). The Independent paired sample t-test was used across all domains to examine the comparison effect of cognitive function between ExG and CoG, with the alpha value set at 0.05.

The result revealed that the CoG had significantly higher performance ( $p < 0.05$ ) in all the domains (O, VP, SP, MP, VO, TO) of LOTCA and decreased reaction time (MP, VO, TO) as compared to ExG. In addition, ExG had significantly lower LOTCA score ( $M = 101.2$ ,  $SD = 4.2$ ) as compared to the CoG ( $M = 108$ ,  $SD = 2.7$ ;  $p = 0.000$ ). The overall test completion time (Seconds) also significantly lower among CoG participants ( $M = 2193$ ,  $SD = 419.7$ ;  $p = 0.000$ ) than ExG participants ( $M = 3176$ ,  $SD = 353.4$ ). The results demonstrated the significant effect of motorcycle noise on decreased cognitive performance and increased reaction time of the participants (ExG). In addition, this study also supports the previous studies regarding the detrimental effects of noise on cognitive performance as conducted on the different population. Therefore, we conclude that on-road under high-noise exposure of noise, motorcyclists can be affected by the impaired cognitive function and reaction time towards an acute risky situation.

**Keywords:** Cognitive impairment; Noise; Motorcyclist; Reaction time

ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia

**A 59**  
TTE 002

## **Conceptual Framework of Built Environment and Social Factors on Cycling Behavior among Residential Neighborhoods**

Norhazlan Haron\*, Halmi Zainol, Wan Rabiah Wan Omar

*Department of Town and Regional Planning, Faculty of Architecture, Planning and  
Surveying, Universiti Teknologi MARA, Perak Branch, Malaysia*

hazlan100@gmail.com

Changing the behaviour of a population has been described as the challenge to urban environment. Its compliance with increasing and developing the issue of urban environment such as pollution, congestion environmental damage, and serious health problem. Increasing of people lead to increase the overuse of the automobile in urban and residential area. Cycling as one of a mode of transport in urban and residential areas has been determined as a solution for urban issue. It is an active and environmental friendly mode of travel. However, the relationship between physical built environment and social behaviour among residential are less associated for increasing the bikeability of residents physical activity. The purpose for this study is to determine the influence of the level of bikeability activity of residential neighbourhood. Content analysis were used to identify the bikeability contributing factors that influence residential behaviour. Two main factors has been identified as major contributing for bikeability behaviour. (1) Physical built environment factors such as land use, accessibility, street connectivity and design. This factors becoming act as barriers to physical activities among residents. (2) Social factors such as socioeconomic status, race, social cohesion also has been determine by category of cyclist and non-cyclists. The main aspect to

determine the interaction between all the factors will be based on the behaviour of individuals and their personal characteristics. From the analysis, all the physical and social factors has been listed to contribute within cycling activity levels among residential neighbourhood. Finding from content analysis support the limited of bicycle infrastructure related with cycling behaviour and its environmental. This study also has been considered in facilitate the design, proper planning of residential neighbourhood by improving actual and perceived environmental conditions. Physical cycling barriers was found among the elements that influence the bikeability behaviour for liveable community. The new conceptual framework of bikeability behaviour was discovered in assisting building designers, planners, and professional designers in producing a better and active lifestyle within neighbourhoods.

**Keywords:** Built environment, social factor, cycling, residential.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 60**  
**TTE 003**

## **Urban Pedestrians and Outdoor Thermal Comfort Studies: Meta-Analysis**

Mei Yee Teoh\*, Ismail Said, Yoke Lai Lee

*Department of Landscape Architecture, Faculty of Built Environment,  
Universiti Teknologi Malaysia, Malaysia*

quare0409@gmail.com

Pedestrian-oriented design, as one of the most sustainable development model that intertwined with other urban models such as transit-oriented design (TOD), has been emerging as hallmark for urban sustainability. It is not only viewed as an important mitigation strategy for urban heat island phenomenon through minimizing the heat and pollution from the heavy use of personal vehicles; but also a potential approach to promote healthier urban lifestyle by encouraging walking as the essential mode of daily movement for urban residents. Pedestrian design and planning look at both pedestrian landscape facilities and outdoor spaces quality because people are highly consider their comfort level during the exposure to outdoors. In most hot and humid developing countries, the high air temperature and unplanned pedestrian system has greatly affected human comfort and reduces the people's desire to go outdoors by walking. This paper, therefore, presents a review of research about outdoor thermal comfort for urban pedestrians. Approximately 30-40 references are reviewed from the range of urban meteorology, biometeorology, thermophysiology, thermal psychology to thermal adaptive mechanism, and they provide a comprehensive insight on pedestrian and outdoor thermal comfort. Outdoor thermal comfort is complex; this is because thermal sensation itself is subjective, integrated with various atmospheric



conditions of physical environment as well as the human's physiological, psychological, and behavioral factors. Review materials from the references are content analyzed into four (4) themes including: urban microclimate, thermal comfort theory and approaches, thermal sensation models and standards, and thermal adaptation. In general, it is found that it is difficult to achieve ideal thermal comfort level or thermal neutrality at outdoors due to the uncontrollable and diverse climatic and human factors. Instead, the so-called human thermal adaptation takes the role to help people achieving thermal satisfaction. In this case, thermal satisfaction at outdoors is rather built upon the availability of thermal adaptive opportunities, which depend on physical improvement, physical and psychological adjustment of people. The adaptive mechanism can affect human thermal sensation and alter their degree of thermal tolerance to microclimate. In conclusion, urban landscape design and planning play a vital role in outdoor thermal comfort as it provides opportunities that can help pedestrian adapting to their outdoor environment and achieving thermal satisfaction. This is a relatively new area of inquiry for urban pedestrian environment; it will be the key towards a walkable city or town.

**Keywords:** Pedestrians; Outdoor thermal comfort; Thermal adaptive opportunities; Thermal satisfaction.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

# **Urban Environment**



**A 61**  
**UE 001**

## **Interstitial Urbanism: Typologies and potential as urban space reconnector**

Raziah Ahmad, Mohamed Ikhwan Nasir Mohamed Anuar

*Centre of Studies for Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Puncak Alam Campus, Bandar Puncak Alam, 42300, Malaysia*

**raziah85@gmail.com**

Urban highways develop according to different paradigms of city planning and design. The overlaid network spaces form by the urban highways in Greater Kuala Lumpur frequently determines the character of the city. The constructed highways, primarily that of the elevated one, often promotes lost space. The presence of urban highways in the 21<sup>st</sup> Century of urban planning, primarily the elevated one, has no longer been embraced. The unproductive spaces and buildings, ill-defined sites, and abandoned spaces caused by this urban infrastructure are prevailing instances of reflection in interstitial urbanism which has been widely discussed in the New Urbanism agenda. At a fundamental level, the presence of interstitial spaces under the elevated highways in Kuala Lumpur usually stand alone as a separate urban element and has always disregarded in the mainstream planning and design. From the economic and socio-cultural standpoint, the mono-functional of urban spaces should be revitalized into a multifunctional and intimate urban realm. Hence, investigating meaning and typologies of the interstitial urbanism for its transformational possibilities of the future usage serves as the aim of this paper. The

objectives of this paper are twofold. The first objective is to explore the meaning and interpretation of urban interstitial spaces in the context of new urbanism. The second objective is to identify types of interstitial spaces and potential usage for rejuvenating existing residual urban spaces. The qualitative research engages primary and secondary data. The empirical study at the three major highways in the Greater Kuala Lumpur- DUKE Highway, AKLEH Highway and MEX Highway focuses on types and characteristics of interstitial spaces provide primary data. To further understand the state of interstitial urbanism, literature review and content analysis of documents from relevant agencies offer as an essential guide to observing elements at the study area. Findings from the three case studies presented suggest that the interstitial spaces under these elevated highways posse's rather similar characteristics that reflect leftover spaces without efficient usage as described in various literature pertaining to interstitial urbanism. If these issues were given less consideration in the new urbanism agenda by political leaders, landscape architects, architects and planners, the disconnected, wasted and abandoned city spaces within the interstitial spaces caused by elevated highways may promote unhealthy activities and give less economic benefits to urban residents.

**Keywords:** Interstitial Urbanism; Typologies; Interstitial Spaces; Elevated Highway.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 62**  
**UE 002**

## **Rethinking Urban Public Space: Physical and Functional Analysis through Visual Surveys**

Norhafizah Abdul Rahman\*, Izham Ghani,  
Mohd Zulhaili Teh, Khairul Adham Ibrahim

*Faculty of Architecture, Planning & Surveying,  
Universiti Teknologi MARA, Malaysia*

[norha776@perak.uitm.edu.my](mailto:norha776@perak.uitm.edu.my)

Good cities must be exciting, human scale, pedestrian friendly, liveable, sociable and fun. If cities can offer choices for people, human activities will happen. Therefore, increasing the use of the spaces in urban environment through human activities that can turn urban spaces in becoming places is crucial to create good cities. Urban spaces that cater to the functional, social, and leisure needs of people have been positively associated with sense of community that lead to the image of the city. In Malaysia, urban street planning and design still lacks the emphasize on crucial aspects such as the physical, social, cultural and economics and providing priority to people on foot. This has resulted in an urban environment specifically on streets that are unattractive as a destination for economic or social activities. Hence, it will cause the failure to create the image of the city itself. This paper aims to propose and discuss optimal design solutions for a better urban environment in Ipoh old town, Perak. The objectives are: 1) to identify nodes and linkages, qualities of place and fabrics of Ipoh old town and; 2) to determine relationships between the quality of the physical environment of the street and social activities that contribute to the uses of the spaces. The study adopted qualitative methodological and strategy in data collection and analysis. Visual surveys were conducted to observe the relationship between the physical

environment and functional user's activities along Jalan Panglima in Ipoh. Field observation was carried out to gather evidence focusing on the functional aspects of the actual scenes of the place through physical and activities mapping. This study has found that the relationship between the physical environment and user activities on street, significantly influenced the quality of place and the fabric of the cities and in turn, contribute to a strong image and identity of the place. Findings of this study will contribute towards reimagining identity of Ipoh as a prominent heritage town.

**Keywords:** public space; physical analysis; functional analysis; visual survey.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 63**  
**UE 006**

## **A Review of the Parametric Characteristics of Urban Environment and its influence to the Urban Quality of Life**

Muhammad Abu Eusuf<sup>1\*</sup>, Muhammad Saadmann RSE<sup>2</sup>,  
Muhammad Mehbub RSE<sup>3</sup>, Mansor Ibrahim<sup>4</sup>

*<sup>1</sup>Department of Civil Engineering, Faculty of Engineering, International Islamic University Malaysia (IIUM), Malaysia, <sup>2</sup>, <sup>4</sup>Department of Urban and Regional Planning, Faculty of Architecture and Environmental Design, IIUM, Malaysia, <sup>3</sup>Department of Mechanical and Mechatronics Engineering, University of Technology Sydney*

eusuf2005@gmail.com

From the myriads of research and case study, it is observed that the influence of urban environment to the urban quality of life (QoL) has been based on the various parameters and factors. Besides, the design and construction industries have an increasing attention in and concern for environmental effects over its total life cycle of urban fabrics through the continuous observing of structural health. Although a significant form of literature has provided positive indication as auxiliary to the effects of natural environments on urban comfort parameters. Little has been known about the specific spatial patterns of urban environment as parametric-relation to the QoL. Urbanization processes in Malaysia have become an integral part of the various parametric matrix confronted by rapid structural growth that influence the life pattern of urban dwellers at large. The essential parameters and factors need to be characterized in order to design a futuristic urban location on the stressed situation, a recent overwhelming growth of urbanization alarming to modification of situation.



This research investigated a method in order to accumulate the parameters and factors those are guided the urban environment and their influence to QoL under a stressed condition. The main objective of the research is to investigate the parametric characteristics of the urban environment at the multidimensional scale and that needed to be examined.

There are many approaches to assessing this interdisciplinary term urban environment, where may focus this issue by experiment and observational process. For the analysis of collected data here employed a parametric valid model with a significant integration of various parameters and factors related to quality of living conditions. The analytical results displayed the vital importance of the most effective environmental mitigation strategies in micro level and enormous macro-level. This scenario is also contributed to the significant mitigation of microclimate on the improvement of Urban QoL. The benefits of the parametric study are exaggerated, when applied on a spatial scale larger than the urban neighborhood scale. We use this scale to measure the level of environment and that influence the quality of life in the city of Malaysia.

**Keywords:** Urban structure and microclimate, design and construction industry, Stressed conditions and urban health, parametric characteristics.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 64**  
**UE 003**

## **The Rise of Rooftop Urban Farming**

Nur Hayati Hashim, Nur Huzeima Mohd Hussain, Asmat Ismail

*Faculty of Architecture, Planning & Surveying,  
Universiti Tecknologi MARA Perak, Malaysia.*

nurhayatie.hashim@gmail.com

Urban farming nowadays is growing in popularity which is aim to take advantage of unused spaces on the rooftop in cities. This issue is becoming fundamentals due to the scarcity of land issue, urbanisation and urban poverty. This paper presents a brief method used in exploring the potential of implementing urban farming on the rooftop areas. The research aims to measure the potential of the rooftop as urban farming at George Town, Penang. The selection of case study based on the two principal which is population size and land use for residential. Thus, Seksyen 5 has been selected due to the major land use area for residential. Moreover, the selection of research sampling is targeted only for high rise residential building in George Town, Penang. The selection of condominium is from the total seven nos flat roof condominium in Seksyen 5, George Town based on the few criteria such as limited food access, low medium income household, infrastructure, rooftop accessibility, rooftop safety and more. This study adopted quantitative method using the questionnaire to conduct a survey. A set of questionnaire that consists of 4 sections; Section A – Respondent demographic; Section B – Space & society; Section C – Skills & knowledge; Section D – Factors; distributed at two selected condominium which is Krystal Height & Greenlane height Block H. The samples selected through convenience sampling which is finally gathered a total of 297 respondents. This study analyses the data

using the SPSS descriptive analysis. The result shows significant findings of reliability test of Cronbach's Alpha 0.918. In conclusion, this study found that the main factors that affect the positive correlation with having rooftop urban farming in residents' area are time, budget and skills. Positively, this paper would facilitate further initiatives and recognise urban farming in an urban area, especially in the high rise residential area.

**Keywords:** Urban Farming; Rooftop; George Town, Penang; Highrise Residential.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 65**  
**UE 004**

## **Street Realms: Reviewing the unique characteristics of Jalan Tuanku Abdul Rahman, Kuala Lumpur**

Zainuddin Ab Rahman\*, Sharifah Khalizah Syed Othman Thani,  
Rafiuddin Roslan

*Centre of Study for Landscape Architecture, Faculty of Architecture, Planning and  
Surveying, Universiti Teknologi MARA, Cawangan Selangor, Kampus Puncak  
Alam, 42300 Bandar Puncak Alam, Selangor Darul Ehsan, Malaysia*

dinz182@gmail.com

For decades, the urban street has become a significant structure that characterised the image of a city. Numerous Urban Design scholars agreed that if the city's streets look interesting, the city looks interesting if they look dull, the city looks dull. Furthermore, most urban street of the traditional town plays a significant influence towards its civilization and growth. In the Western World, public realms is commonly associated with the quality of great parks, squares or boulevards. However, many urban realms of Asian cities are attributed by the quality of the street where it acts as spaces for socialising, as well as to dwell in and serve numerous local necessities that bond people with their environment. Nevertheless, this symbiotic relationship between human and the environment seems to be greatly disturbed by the modern development trends. The modern city that characterised by the networks of wide elevated highways, monofunctional land use, super-scale development and the rise of big box shopping malls tend to segregate inner city, create high dependability to the indoor environment and keep people away from their streets. In Malaysia context, Jalan Tuanku Abdul Rahman has demonstrated the quality of a good local street through its distinctive characteristics and

usage. Despite the current development pressure from its surrounding, Jalan Tuanku Abdul Rahman managed to remain relevant, sustain the essence, charm and vibrant of its Genius Loci. Hence, recognizing the key attributes that constitute a good street ambience is essential to sustain the sense of local pride, capsule city's image, and evoke an appreciation towards the local street. In this light, this paper attempts to assess the quality and identify the characteristics of the Jalan Tuanku Abdul Rahman, Kuala Lumpur as a catalyst to promote urban quality of life. The qualitative method through content analysis, site observation and site evaluation were conducted to examine the implication and significance of urban street design on physical, social and environmental aspect. The findings underline vital attributes that constitute the unique character of Jalan Tuanku Abdul Rahman that embrace urban realms and the Genius Loci of Kuala Lumpur. This paper is hoping to assist researchers, multidisciplinary professionals and academicians in recognizing the key attributes and influence of urban street towards the wellbeing of the urban realms.

*Keywords:* Urban street; Street characteristic; Quality of life.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 66**  
**UE 005**

## **Thermal Performance of a High-Rise Residential Building with Internal Courtyard in Tropical Climate**

**Lobna Hassan Elgheriani\***, Parid Wardi Sudin,  
**AbdulBasit Ali Almhafdy**

*Faculty of Architecture and the Built Environment,  
Limkokwing University of Creative Technology, Malaysia*

Lobna.arch@gmail.com

Natural ventilation is an effectual passive design approach to create a better indoor thermal condition as well as energy efficiency. The primary goal of building design is providing a healthy and comfortable indoor environment titled as sustainable architecture. The microclimate around the building, establishing through the interaction with other buildings or the natural environment, is an important factor in the building energy consumption and indoor building environments. The latent of enhancing the indoor air quality is remarkable in naturally ventilated high-rise buildings. Air temperature, Air velocity, and many other factors are vital indicators that should be examined to improve thermal performance in buildings. Moreover, the use of buoyancy-driven ventilation technique is very scarce in studies related to air velocity with air temperature distribution in high-rise buildings. Few studies have been conducted in the application of building characteristics such as envelope design, form and their effects on the overall indoor ventilation. In most cases, when it comes to commercial buildings, designers tend to adapt mechanical systems to deal with major climatic issues, however, in residential buildings, natural ventilation is superior. In order to assess the thermal performance with regards to air temperature and wind patterns; Computational Fluid

Dynamics (CFD) has been applied in many types of research to investigate ventilation eminence in high-rise buildings. However, research on natural research on natural ventilation inside courtyard and its corridor size effect on the thermal performance using CFD techniques are seldom. This paper investigates different design strategies for optimizing natural ventilation in residential high-rise courtyard buildings in Selangor, Malaysia. High-rise residential building with a high window to wall ratio is chosen as the studied building imposes the worst problems in terms of thermal environments in the tropics, alongside alternative scenarios in comparison. Exploiting the CFD method, building orientation and courtyard corridor size was attuned, wind paths were created into internal zones, and wall to window (WWR) ratio was constructed with different percentages in two identical units facing, oppositely, east and west. The aim of this paper is to augment the WWR, orientation and courtyard corridor size for improving the design of naturally ventilated courtyard high-rise residential buildings. Results show how the thermal performance are distributed on both, the building scale and the unit scale. Briefly, results indicated that contending with WWR, orientation and courtyard corridor size could increase the potential of improving its natural ventilation and thus, thermal performance.

**Keywords:** Thermal Performance; Residential High-rise buildings; Air Velocity, Courtyard.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

**A 67**  
**UE 006**

## **Wind-Induced Ventilation Techniques for Passive Cooling**

Ahmad Ridzwan Othman, Fatin Farhah Muda

*Centre of Studies for Architecture, Faculty of Architecture, Planning and Surveying,  
Universiti Teknologi Mara, Malaysia*

dwan\_arc7@yahoo.com

Air conditioning has been the main method of cooling in building, especially in a hot country like Malaysia. Heating and cooling contribute for 60-70% of total energy use in commercial and domestic buildings. The Severe energy crisis has been witnessed in developing countries lately due to increasing consumption of energy. This has led to environmental pollution resulting in global warming and ozone layer depletion. Sustainable design is the most appropriate approach to address these global issues. Passive cooling techniques can reduce the peak cooling load in buildings, thus reducing the size of the air conditioning equipment and the period for which it is required. Since passive cooling systems maintained a comfortable indoor temperature using non-mechanical methods, it uses less energy, and it could be the solution for reducing the negative impact of buildings on the environment. Natural ventilation has been the main cooling strategies for people in the past, but now it gradually became a popular method of ventilating buildings due to the increase sustainability awareness. There are much wind-driven or wind-induced ventilation technique that has been applied into building such as atria, courtyards, wind chimney, wind tower, wind catchers and many more, however, not all of them are suitable for buildings in an equatorial country like Malaysia. Despite the numerous studies on the wind-induced



ventilation techniques, most of them only focus on one strategy, and the effectiveness is inconsistency for it depends on many other influential factors. The aim of this research is to review the wind-induced technique suitable for an equatorial country like Malaysia. The first objective is to identify the principles and the factors involved in making the wind-induced ventilation suitable for buildings in an equatorial climate. Secondly is to determine the effectiveness and strategy to improve their performances in future. Few samples of induced-wind ventilation systems incorporated into buildings in Kuala Lumpur are selected, assess their performances and highlight the factors influencing the strengths and the weaknesses. The study found that the success of wind-induced ventilation technique depends on the wind velocity of that certain areas and the height of the building, this is because the wind pressure increases with building height. Other factors that affect the effectiveness of the wind-induced ventilation techniques are the shape, size, building orientation and local climate. It is also learned that the existing strategies can be upgraded by combining with another strategy to achieve optimal thermal comfort in future design.

**Keywords:** Sustainable design; Passive cooling; Wind-induced ventilation; Thermal comfort.

*ISBN 978-0-9955269-3-8 © 2018. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., U.K. Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia*

# **Authors Index**

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

Abdul Hadi Nawawi	25, 49, 101, 139
AbdulBasit Ali Almhafdy	163
Abdulkarim Kabiru Haruna	125
Afrina Shaheera Mazree	141
Ahmad Fawwaz Ahmad Saleh	139
Ahmad Ismail Illman Razali	107
Ahmad Ridzwan Othman	165
Aiman Nadia Akmar Rahman	57
Aina Mawaddah Adnan	19
Ajau Danis	61
Amanina Mat Ghani	19
Anila Ali	145
Arita Hanim	59
Arman Abdul Razak	121
Asmat Ismail	159
Atikah Fukaihah Amir	29, 31
Azran Mansor	35
Basri Rashid	3
Che Bon Ahmad	33
Che Noriah Othman	79
Chen Ting Wu	43
Cyndra Robert Budull	77
Danfulani Babangida Idi	53
Daodu Tosin	11
Dasimah Omar	15, 129
Edie Ezwan Mohd Safian	139
	169

Erne Suzila Kassim	81
Faridah Ismail	97
Fatin Afiqah Md. Azmi	115
Fatin Farhah Muda	165
Fatin Faridah Nordin	7
Ghazali Mohd Amin	101
Graipop Pasirom	21
Hakimi Ahmad	141
Halmi Zainol	99, 147
Hamisah Abd. Rahman	109
Hasnul Faizal Hushin Amri	133
Helmi Hamzah	95
Herwina Rosnan	75
Hui Chin Huang	37
Ismail Said	11, 123, 125, 149
Izham Ghani	155
Jamalunlaili Abdullah	33
Jamilia Mohd Marsin	5
Kamal Izzuwan Ramli	3
Kamarul Ariff Omar	15
Kartini Ilias	9
Khairil Anuar Md Isa	61
Khairul Adham Ibrahim	29, 155
Khairul Anwar Mohamed Khaidzir	53
Khairul Fikri Khairudin	119
Laily Azmira Tarmizi	73

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

Lily Ting Shu Chi	39
Lobna Hassan Elgheriani	163
Maaruf Abdul Ghani	117
Maimunah Ramlee	129
Mana Eiambua	89
Mansor Ibrahim	157
Maryam Farooqui	79
Maslin Masrom	81
Mei Yee Teoh	149
Mohamed Ikhwan Nasir Mohamed Anuar	153
Mohammad Fadhil Mohammad	47
Mohd Bakri Jali	117
Mohd Hanizun Hanafi	121, 141
Mohd Ramadan Ab Hamid	57, 73
Mohd Suleiman Murad	61
Mohd Umzarulazijo Umar	121, 141
Mohd Zulhaili Teh	155
Muhamad Hilmi Mohamad @ Masri	139
Muhamad Solehin Fitry Rosley	127
Muhammad Abu Eusuf	157
Muhammad Mehbub RSE	157
Muhammad Saadmann RSE	157
Nabilah Yahya	71
Natapon Anusorntharangkul	85
Nik Hanita Nik Mohamad	103
Nik Muniyati Nik Din	41
	171

Noor Aimran Samsudin	127
Nor Afifah Azizan	73
Nor Diana Aziz	25, 49, 101, 133
Nor Hanisah Mohd Hashim	103
Nor Rima Muhamad Ariff	25, 49
Noralizawati Mohamed	55
Norazmir Md Nor	117
Norhafizah Abdul Rahman	155
Norhazlan Haron	147
Noriah Othman	55, 95, 97
Norimah Said	7, 57, 73
Norizan Mt Akhir	29
Normayuni Mat Zin	115
Norrina Din	3, 79
Norzayana Yusof	75
Nur Afifah Hamjah	77
Nur Atiqah Jamaludin	59
Nur Hanim Ilias	31, 35
Nur Hayati Hashim	159
Nur Huzeima Mohd Hussain	29, 35, 95, 99, 159
Nuraisyah Chua Abdullah	75, 87, 91, 109, 111
Nurfarahain Johari	9
Nurfarahah Najwa Azman	57
Nurfarzana Mohd Al Hapiz	133
Nur-Hasanah Ruslan	77
Nurlelawati Ab. Jalil	13, 59

Nurul Farhana Adnan	7
Nurul Hafizah Azizan	65
Nurul Hamiruddin Salleh	119
Nurul Huda Muhamad	47
Nurul Nadhirah Abd Rahman	135
Parid Wardi Sudin	163
Rafiuddin Roslan	161
Raja Nafida Raja Shahminan	5, 127
Ramly Hasan	97, 101
Ratananaphadol Smitinand	89
Raziah Ahmad	153
Rohani Mohd Shah	87, 91, 107, 109, 111
Rohazar Wati Zuallcobley	107
Roslinah Mohamad Hussain	145
Roslinda Ghazali	69
Roswati Nordin	7
Rozyah Mohd Yunus	129
Rushdina Izham	13
Ruwaidah Borhan	31
Saberi Othman	15
Salim Bashir Umar	123
Sapura Mohamad	127
Sarah Hairudin	61
Sarath Simsiri	89
Saripah Abdul Latif	41
Shafa Marzidah Abdullah Ayeop	99
	173



Sharifah Khalizah Syed Othman Thani	103, 161
Shenglin Elijah Chang	37, 43
Siti Aishah Wahab	133
Siti Aisyah Abd Samat	33
Siti Noraini M. Tobi	81
Siti Rasidah Md Sakip	69
Siti Sabariah Buhari	135
Siti Syamimi Omar	31, 35
Srazali Aripin	119
Suriatini Ismail	115
Syahrul Bariah Abdul Hamid	71
Sy Abdul Mutalib Al Junid Sy Abdul Rahman	103
Syed Iskandar Ariffin	5
Theresa Ahing	77
Wan Hashimah Wan Ismail	39
Wan Nazriah Wan Nawawi	19
Wan Nor Bayah Wan Kamarudin	19
Wan Rabiah Wan Omar	147
Yanin Rugwongwan	85
Yap Bee Wah	81
Yoke Lai Lee	149
Zaharah Mohd Yusoff	15
Zainuddin Ab Rahman	161
Zaiton Abdul Rahim	13
Zaiton Mustapha	41
Zaliha Husin	109

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

Zalina Samadi	129
Zamalia Mahmud	65
Zul Zakiyudin A.Rashid	121

*Abstracts, AicQoL2018PerhentianIslands,03-04 March 2018  
Perhentian Island Resort, Malaysia*

*Another Event Managed by*

*emAs*

**AMER Event Management & Services**

emAs emAs Resources (SA0426951-D)



Published by:

**e-International Publishing House, Limited**

(Registration No: 10062603, for England & Wales)

18 Westpoint 58 West Street

Sheffield S1 4EZ

United Kingdom