

# Abstracts

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## *AicQoL2020Malacca*

8th AMER International Conference on Quality of Life  
Mahkota Hotel Melaka, Malacca, Malaysia. 18-19 Mar 2020

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**8th AMER International Conference on Quality of Life**

Mahkota Hotel Melaka, Malacca, Malaysia

18-19 Mar. 2020.

***Editor***

Mohamed Yusoff Abbas



## **Acknowledgement**

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Thank you all !

## **Foreword**

This 8th AicQoL2020Malacca, (AMER International Conference on Quality of Life) our 30<sup>th</sup> international conference to be organised, managed to attract an overall total of 62 numbers of approved abstracts.

The abstracts approved were simply grouped generally under 18 sub-categories, although quite a number could have been easily placed under more than one category. The top four categories in order of popularity involved the following environments: - Educational / Learning Environment, ELE (10 numbers or 16%); Healthcare / Healing Environment, HE; Landscaping Environment, LaE; Transportation / Travelling Environment; TTE; and Urban Environment UE; all 6 numbers each.

**Prof. Dr. Mohamed Yusoff Abbas**

Editor

8th AicQoL2020Malacca

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18 Mar 2020

# 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), FSPU, 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 Landmark International (ASLI) Conferences on QoL, back-to-back. 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 non-ASEAN countries. AicQoL is also strategized to coincide with AMER's AGMs.

The maiden AicQoL2013Langkawi, Malaysia was held on 6-7 April 2013. That was followed by:-

AicQoL2014KotaKinabalu, Malaysia, 04-05 January 2014

AicQoL2015Jakarta, Indonesia, 25-27 April 2015

AicQoL2016Medan, Indonesia, 25-27 February 2016

AicQoL2017Bangkok, Thailand, 25-27 February 2017

AicQoL2018PerhentiansIslands, Malaysia, 03-04 March 2018

AicQoL2019Bali, Indonesia, 16-17 Feb 2019.

## 8th AMER International Conference on Quality of Life: Theme Synopsis

AicQoL conferences main theme addresses Quality of Life (QoL) issues affecting the Asian communities living in both Asian and non-Asian countries. E-B issues affecting non-Asian communities are also most welcome.

Paper contributions shall involve the following environments (though not exhaustive):-  
Children / Youth Environment;

Climatic Environment  
Commercial/Retail/Services Environment;  
Communication / Social Media Environment;  
Community Environment / Social Psychology;  
Construction Environment;  
Design & Creative Environment;  
Educational / Learning Environment;  
Elderly Environment;  
Energy Environment;  
General Psychology;  
Green Environment;  
Healthcare / Healing Environment;  
Hospitality / Tourism Environment;  
Inclusive Environment;  
Landscaping Environment;  
Legal Matters;  
Leisure / Recreational / Sports Environment;  
Local Cultural / Heritage Environment (Food included);  
Management & Production Environment;  
Natural Environment;  
Policy Environment  
Public Sector Environment,  
Residential Environment;  
Rural Environment / Rural Psychology;  
Sustainable Environment;  
Technology-related Environment;  
Transportation / Travelling Environment;  
Urban Environment / Urban Psychology;  
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# **Children / Youth Environment**



## A 01 CYE 002

# Factors Influencing Active Travel Mode to School for Primary School Children. Case Study: Shah Alam City, Malaysia

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### Abstract

Walking and biking are categorized under active travel mode, which is a healthy way for children to explore their environment and enable them to be more independent. Walking to school is one of the active physical activities for children. However, nowadays, children prefer passive mode of transport to commute to school. Hence, it is essential to know the factors that influence children to choose walking as a mode of traveling to school. This research aims to identify the factors that influence children to walk to school. It also evaluates the safety level within school areas and their surroundings. To achieve this, the study identifies and evaluates the factors that contribute towards children's preference, as well as measuring the safety level for primary school children when walking to school. Besides, this research will propose a conducive environment for children to walk to school. This study, therefore, investigates children's preference through their parents to understand their perceptions on the choice to walk to school. Through a case study method and a stratified random sampling approach, 384 parents of primary school children in the city of Shah Alam were selected as respondents. The survey included inquiries on children's physical activity, mode of transport, parental physical activity and health-conscious, as well as socio-demographic background. Also, a Focus Group Discussion (FGD) was conducted to identify the implementation strategies at the national and municipal level as an effort to encourage active transportation among primary school children. Results indicated that parents send their children using private vehicles to school due to lack of safe home-school

path provisions. Hence, the result from this study will assist town planners when planning for pedestrian specifically for primary school children and will contribute to the academic field. Other than that, it will put forward the theory of walking-to-school mode. Inevitably, recommendations from this study may help to reduce obesity and injury cases among primary school children.

**Keywords:** Active Travel Mode; Transport; Walking; Primary School Children

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## A 02 CYE 003

# The Implementation of Active Design for Technology-Driven Activities in Malaysia

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### Abstract

The younger generations nowadays focused more on electronic media technologies as part of their daily lives. This sedentary state of activity has resulted in a decrease in outdoor activities and the growing problems of corpulence, a higher rate of malady and deterioration of mental state among the youth. According to the research conducted by the World Health Organization (WHO) in 2011, Malaysia scored the top overweight populations country in South East Asia. As part of combating this physical inactivity, a new generation of interactive games or better known as exergaming is introduced to propel youngsters to be progressively active and energetic. Exergaming combines the art of technology and sport science. It provides a strategic tool to fight against noncommunicable diseases (NCDs). While this new invention can help to improve physical activity levels and reduce health problems, the results require a more dynamic effort. As such, this paper intends to investigate the potentiality of implementing the active design in technology-driven activities in Malaysia in enhancing the level of physical activities and health among the younger generations. The research is conducted in three (3) stages. The first stage focused on the establishment of active design parameters from the existing literature. The second stage involved comparative analysis of two (2) case studies which are The Rift and Battle Arena. Both buildings provide exergaming activities with The Rift being the biggest virtual and augmented reality (VR/AR) theme park in Malaysia and the later as the biggest eSport centre in South East Asia. The findings obtained from the case studies are extracted and experimented into a new typology of building design. The results show minimal visibility of active design in the existing exergaming centres. By injecting the attributes of active design

into the building layout, helps to improve the dynamic and quality of physical activities among the youth.

**Keywords:** exergaming; interactive; physical activity; active design

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## A 03 CYE 001

# Visits and Preference of Youths for Urban Green Infrastructure (UGI) in Kuala Lumpur City

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### Abstract

Excessive time immersing in social media and gadgets in this information age has implications for young people in a city. Particularly, it has resulted in sedentary behaviour and lesser time spent engaging in outdoor activities. It may be the cause of the rise of non-communicable diseases (NCDs) among adolescents and young people. Nature in a city, which is formed by recreational parks and smaller green spaces are the urban green infrastructure (UGI) vital to overcoming the sedentary lifestyle. They act as reinforcement to promote healthy lifestyle for wellbeing. UGI as nature is proven to offer various health benefits physically, mentally and socially. The study explores young people's use and preference of recreational parks as factors that attract them to the UGI. A survey of approximately 1400 adolescents and young adults was conducted in Kuala Lumpur and Putrajaya. Based on purposive sampling method, a self-administered questionnaire survey was conducted about use, visits, preference and attributes of large recreational and neighbourhood parks in Kuala Lumpur and Putrajaya. The majority of the sample comes from Wangsa Maju-Maluri zone in Kuala Lumpur and the smallest sample from Putrajaya. The results of the study use descriptive statistics analysed by Statistical Package for the Social Sciences Software (SPSS). The study identifies: (a) leisure time activity, (b) frequency of visits to parks, (c) the most visited parks, (d) preferred attributes, (e) issues, and (f) recommendations to improve UGI. Agreement scale ('often') on indoor versus outdoor leisure time still favour indoor activities than outdoor, suggesting that 'watching tv',



'gadget use' 'relaxing at home' as the main activities, as compared to sightseeing in public parks and active outdoor sports in UGI. They sometimes visit well-known parks in Kuala Lumpur (at least once in three months) such as Metropolitan Kepong Park, Titiwangsa Lake Garden and KLCC Park. KLCC Park received the highest percentage in terms of use. The attributes with the mean high score are such as safety, clean, comfortable, adequate facilities, nature and accessibility. It seems that the way recreational parks have integrated into the lives of city residents highlight that they are rather a crucial and essential service delivered by the local government. The city urbanites need recreational parks as fundamental requirements for their physical and psychological wellbeing. The needs for suitable activities and programmes in recreational parks may promote urbanites to favour outdoor leisure time activities, thus reducing sedentary indoor lives.

**Keywords:** Urban green infrastructure (UGI); Recreation; Leisure; Healthy lifestyle

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# **Climatic Environment**



## A 04 CLE 001

# Local Knowledge for Global Actions: The role of traditional ecological knowledge in climate change adaptation

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### Abstract

Indigenous people live close to the land. Unfortunately, this intimacy, which gives them an early warning about climate change, also means that they are seriously jeopardised from the magnitudes of it to a greater extent than the others. Making up about 5% of the global population, the indigenous people live in poverty and the most marginalised group in the world. Global climate change, on the other hand, has threatened indigenous peoples' homes and traditions. It has also aggravated the loss of land and resources as well as marginalised politics and economics, discrimination and unemployment. Despite the vulnerabilities that they face, indigenous people have exhibited creative and unique ways of adapting to environmental changes. Traditional Ecological Knowledge (TEK), possessed by the indigenous people, maybe the key in combatting climate change owing to their intimate knowledge of their land. This article aims to describe what role does TEK play in the context of climate change adaptation by analysing peer-reviewed literature, project websites and grey literature. Search keywords include TEK, climate change adaptation, climate change, traditional knowledge, indigenous adaptation, indigenous people, adaptive capacity, resilience and socio-ecological systems. The findings show that four elements of the TEK systems, namely: (1) local knowledge of environment; (2) land and resource management; (3) social networks and institutions; and (4) worldviews and belief systems help indigenous people to understand local changes and adapt to environmental and climate stresses. More importantly, documented adaptation strategies based on TEK also

promote socio-ecological systems resilience. Hence, it is essential to consider the four elements of TEK when documenting local approaches to understand the overall picture of climate change impacts and local-based adaptation. Such systems can fortify community capacity to deal with any disruption and maintain ecosystems under uncertain conditions. However, the severity of climate disturbance will further challenge this knowledge system, which would require intervention in global institutions and practices.

**Keywords:** traditional ecological knowledge; climate change adaptation; indigenous people; resilience

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## **Commercial / Retail / Services Environment**



## A 05 CRSE 002

# Challenges of Business Innovation in Business Environment

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### **Abstract**

Innovation in business is a platform to bring a new and creative idea notably in the era of digitalization. The aid of innovation may drive the development and growth of a business, expand the market, leading the business competitive and ultimately maximize the profit. Innovation is incapable to implement independently. There must be a collaboration and engagement between the innovation ecosystem include academia, industrial players and government. One highlight issues of the collaboration and engagement are the research and development resource allocation might be weakly linked to human resources planning and minimal connection with industry in the undertaking of research activities. In reality, the industry practitioners are disconnected from universities in Malaysia when academicians are seen as not in the bottom line as what industry needed. A gradual increase in patent applications and commercialisations of research by universities. However, the overall commercialisation rate is low or limited among universities which could be due to the effects of policy implementation. It can be seen that there is a gap in strengthening the interaction between policy design and actual implementation of programmes at institutions. In the pillar of business sophistication, there are no indicators available yet to measure university and industry collaboration. Industry and academia collaboration is extremely important to strengthen therefore, support towards the business innovation contribution. In an ideal innovative world, a corporation buys an academic brilliant idea, mass produces it and makes fortune. Therefore, this paper comprehends to discuss the current and critical challenges in both perspectives of academia and industry of innovation in business. The



discussions will highlight several issues, challenges and limitation that explore through a method of literature review analysis. The finding of this study implies to develop a new conceptual framework of the challenges innovation in business and explore the recent issues related to collaboration and engagement between academia and industry.

**Keywords:** Innovation in Business, Business Productivity, Academia-Industry Collaboration, Engagement

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## A 06 CRSE 003

# Exploring Gender Differences in Complaint Behavior of Millennial Consumers

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### Abstract

Understanding and managing consumer's complaint behavior (CCB) is incredibly essential in the competitive business environment. Consumer complaint used as a tool for improving quality and should not be treated as a problem. Nowadays, consumers are better educated, more knowledgeable, and more demanding. They are also unwilling to compromise on value, particularly millennials. They are eagerly paying for goods and services that meet their needs and expectations. The era in which consumers took everything that was offered by a company is now gone. They are not hesitant to lodge a complain when dissatisfied with the goods or services provided. However, studies on CCB conducted in Malaysia are relatively few, mainly focusing on millennial consumers. The main aim of this study is to investigate whether male and female millennial consumers differ in their complaint behavior and its aftermath. The study examines the moderation effect of gender and millennial's complaint behavior. Data used for the study was collected using the self-administered questionnaire. The researchers distributed a total of 430 questionnaires to millennial consumers who have experienced a dissatisfaction episode within 12 months. Only those aged up to 35 years old may provide their responses. They also were given a screening question before they can participate in this study. Only those who experienced a service failure or breakdown within the past 12 months were selected to provide their responses. Data gathered was analyzed using Partial Least Square (PLS) method. The product-indicator approach was employed to confirm the hypothesis. The results demonstrate that

gender was significantly associated with millennial's complaint behavior. Therefore, the belief was supported. These findings are generic across the sex-type. Besides, the construct of this study also indicated acceptable for the model of this study. The theoretical and managerial implications of the findings were discussed. Other than that, the researchers made several useful recommendations concerning the results of this study.

**Keywords:**millennials; complaint behavior; gender; sex-type

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## A 07 CRSE 004

# Factors That Influence Entrepreneurs' Intention To Purchase A Franchise In Malaysia

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### Abstract

The pioneer of franchising in Malaysia was Singer and Bata back in the 1940s. Franchising becomes known to the public only after the government launched the franchise development program in 1992 and the establishment of the Malaysian Franchise Association (MFA) in 1994. The franchise industry has contributed RM27 billion, which equivalence to USD 6.6 billion to Malaysia's economic growth. Domestic Trade and Consumer Affairs Ministry forecasted that the franchising industry to add RM35 billion to Malaysia Gross Domestic Product (GDP) by 2020. This study attempted to investigate the relationship between franchisor's brand name, independence, risk, and provision of training and support towards entrepreneurs' intention to purchase a franchise in Malaysia. Therefore, the study addresses a gap in research concerning the effect of mentioned factors on the growth of the franchise industry in Malaysia. The research design for this study is by using a survey method to measure the perspective of entrepreneurs in Malaysia. Data gathered were analyzed using descriptive statistics to represent the main characteristics of the samples. The Partial Least Square (PLS) method was employed for further analysis to test the hypotheses. Several investigations were undertaken to test the proposed hypothesis empirically. The findings indicate that franchisors' brand name, independence, and provision of training and support are significant to entrepreneurs' intention. In contrast, the risk was found to be insignificant to the dependent variable. The result of this research is only applicable to the Bumiputera entrepreneurs as we are not able to collect the data from other races, such as Chinese and Indian. The data that the researchers manage to collect purely came from Bumiputera entrepreneurs in Malaysia. It

is worth to note that entrepreneurs are very much interested in purchasing a franchise due to the training and support that they will receive from franchisors. This will not only sparks the interest of the entrepreneur to acquire franchising rights but also promises a long-lasting and sustainable business.

**Keywords:**Franchise, Brand name, Independence, Risk, Training and support, Regression analysis

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## A 08 CRSE 001

# Fundamental of Entrepreneurial Orientation

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### **Abstract**

Various sets of a study exploring the concept of entrepreneurial orientation in a firm's behavioral approach, managerial philosophy, or decision-making. EO research findings have primarily focused on firm-level entrepreneurship. The fundamental of entrepreneurial orientation (EO) is needed to engage entrepreneur being creative, innovative, risky as well as uncertain activities in the market place and discover new opportunities before their competitors. These three dimensions are resulting from Danny Miller's early work on the firm's strategy-making. Unfortunately, the critical challenge nowadays among local entrepreneur among SMEs in Malaysia are lack of awareness and practices of entrepreneurial orientation which are innovativeness, reactivity, and risk-taking. The business failed to sustain in the market due to the limitation to produce new and creative ideas in their business. Practicing adapt and adopt with existing practice in entrepreneurial activities contribute to an outdated business idea. Being pro-active is being the first to introduce new products or services. Firms in Malaysia need to be a head start in establishing brand recognition in generating customer loyalty. Due to low risk-taking propensity, Micro, Small Medium Enterprises in Malaysia growing in number each year but they are not into becoming a large corporation due to unwillingness to commit resources to undergo activities and projects which resulted in the uncertainty of the outcomes. This firm is not eager to make large and risky commitments. Hence, this study discussed the fundamental of entrepreneurial orientation and practices of EO among the new entrant in business.

**Keywords:** Risk-taking propensity, entrepreneurial orientation, micro, and small business owner

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**A 09**  
**CRSE 005**

**Pathway to Financial Well-being:  
A review on the role of psychological factors**

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**Abstract**

The Malaysian Well-being Index (MWI), developed by the Economic Planning Unit(EPU), is one of the vital social indicators used by the government to gauge the level of society's well-being and overall quality of life. Financial is one of the essential components to determine overall well-being apart from career, physical, social, and community. A person who can fully meet current and ongoing financial obligations, feel secure on their future economic, and able to make choices to enjoy life has achieved financial well-being. Understanding the economic well-being is very important, especially among workers because they are the back-bone to support themselves and their family. Good economic well- being will help employees to track their financial status and improve companies' productivity, commitment and retention. On the other hand, the diminishing level of economic well-being will directly affect the employees' psychological (such as increase level of anxiety and stress) and physical health (migraine and lower health level). Previous research regarding the underlying factors of financial well-being proved that financial behaviour is one of the main determinants of economic well-being; however, mixed findings are found from prior studies regarding the potential antecedents that affect the behaviour to increased economic well-being. Past research indicated that beyond the importance of knowledge, attitudes and socialization factors in determining the economic behaviour and well-being, the psychological factors also a more significant impact on the economic well-being of an individual. These psychological factors needed further investigation for identification of specific psychological factors affecting economic well-being. This study attempted to analyze empirical and scholarly research findings. This assemblage of



reviewed research papers will be useful for the academia and industry to cultivate understanding on the psychological rumblings of an individual. It would promote positive financial behaviour leading to greater economic well-being, hence uplifting the quality of life of affected parties.

**Keywords:** Financial well-being; Financial behaviour; Psychological Factors

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# **Construction Environment**



## A 10 CoE 003

# A Systematic Review of Employee Turnover Antecedents in Construction Industry

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### **Abstract**

The need to maintain work-life balance is among the approach to improve employees life quality. This aspect however is less apparent than in other studies in the construction industry. Among the factors related to work-life balance is reflected in employees turnover. The employee is part of organisation resources; hence turnover issue results in financial loss generally. In specific contexts, the effect of turnover involves a variety of factors including skills shortage, time, cost and sustainability in the overall industry context. Therefore, the employee retention strategy is crucial to address this issue. Demand for employees in the Malaysian construction industry is high, with 10.96% projection in 2020, wherein 8% of the employees would be involved in the construction domain. Competent team members are an integral indicator of a successful construction project despite other related factors. Employee turnover has become an issue in the labour market due to its impact on organisations. Nonetheless, studies regarding this issue in the construction industry are in scarcity. That being mentioned, the objective of this study is to conduct a systematic literature review that offers an overview of the present state of research concerning the turnover antecedents in the construction industry, apart from identifying the challenges and future research directions. This paper utilised the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) approach. A total of 26 articles were retrieved from three databases, including Scopus, EBSCOhost and American Society of Civil Engineers (ASCE). The articles were reviewed based on three themes; organisation, individual, and external determinants. Eight subthemes emerged from the main themes. From the analysis, it can be concluded that management as critical antecedents in turnover

issue in a construction industry context, followed by compensation and demographic elements. The analysis also reveals that turnover studies in construction industry domain are low, require improvement of the research focus. On top of that, the sample reveals that employee turnover studies in the construction industry are lack focus on projects, organisations and professional employees, also on mixed-method and qualitative research design. The recommendations include conducting employment turnover in the construction industry by focusing on the project, organisation and professional employees using either qualitative or mixed-method approach. The implication of this finding fills the gap in employees turnover studies in the construction industry, thus improving employee life quality.

**Keywords:** Construction Industry; Employee turnover; Systematic review; PRISMA

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## A 11 CoE 002

# Execution of Corporate Social Responsibility (CSR) in Construction Industry to Enhance Quality of Life: A literature review

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### **Abstract**

**Aim & Objective** – In general, Corporate Social Responsibility (CSR) could help in creating wider trust and confidence in a company from stakeholders as well as society. Construction firms are supposed to incorporate CSR as an extra effort to enhance social welfare, while attempt to minimise their adverse impacts on the environment. They can contribute to CSR in several ways, such as well-designed buildings which improve quality of life and wellbeing. Somehow, they found some difficulty to fulfil CSR, and it is crucial to formulate CSR activities accordingly. The main purpose of this paper is to produce a literature review primarily related to the CSR in the construction sector, taking into account scholarly and industry publications published over the last ten years. This study also aims to form a guideline by identifying the main elements based on the previous CSR research that could be considered into three phases of CSR implementation process incorporating with the quality of life indicators.

**Methodology** - The research involved a review of 36 papers published in 17 journals and eight conferences in the construction field from 2010 to 2019. In order to carry out a systematic review, a three-step process was implemented, which involves the selection of relevant journals, the identification of related articles and the classification of them according to their context and theme.

**Findings** - The content analysis results show that the main contents or keywords in CSR can be classified into a few elements that can be considered in each of the three phases of necessary CSR implementation process: preliminary phase, execution phase and post-execution phase. To form a guideline, this study proposed a coding system that matches each of the elements with these basic three phases of project execution, and the results had matched with five out of nine quality of life indicators.

**Research implications** - The implication from the findings to the government is in the improvement of existing principles or guidelines to encourage people in the industry and society on the adoption of CSR practices coincides with one of the global goals for sustainable development, which is sustainable cities and communities. For construction organisations, to achieve their goals to be socially responsible, the findings may give implications to their existing or upcoming CSR practices in developing competitive organisational advantages.

**Keywords:**Corporate Social Responsibility (CSR); Quality of life; Construction industry.

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## A 12 CoE 001

# Monte Carlo Simulation of Risk Analysis for Cost Prediction in Green Building Project

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### **Abstract**

Monte Carlo Simulation is a mathematical technique that generates random variables for modelling risk or uncertainty in the research. This simulation provides a probabilistic estimate of the uncertainty in a model, given the uncertainty or risk and useful tool for approximation of reality. Construction project usually involves high investments. It is, therefore, a risky adventure for construction companies to be involved in construction projects due to the various risks and the tremendous uncertainty existing within the construction stages. Determination and quantification of risks and their impact on project costs within the planning stage describe being one of the most challenging areas. Inaccurate of cost estimating one of the financial risks occurs in the construction project. This technique is suitable and benefits for the various client such as public sector to evaluate the realistic costing proposed by the estimator and also can generate a realistic decision making for the project without wastage of the client's fund or companies. Through this approach, quality of life received by the client in investing budget without waste of propose funding in the construction project. This research aim to investigate the accuracy of cost estimation using a Monte Carlo approach in the development of a green building project. The methodology used in the case study approach consists of the document analysis. This document involves the data from estimation cost for a hospital in green building projects. A purposive sample is a non-probability sample that is selected based on the characteristics of a population and the objective of the study. The result shows through Monte Carlo simulation, and this method can predict the worst return from the



accuracy of the estimation and given absolute confidence for project development in the construction project. Therefore, quality of life received by the client through successful implementation of the project according to time, cost and quality.

**Keywords:** Monte Carlo, Risk Analysis, Cost Prediction, Qualitative approach, Quality of life

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## **Educational / Learning Environment**



## A 13 ELE 009

# A Reflective Measurement Model of Organizational Citizenship Behaviour and Organizational Cynicism

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### **Abstract**

The emergence of Organizational Citizenship Behaviour (OCB) relies heavily on the willingness of the various parties who are involved to contribute positively, especially the lecturers as they are a critical part of any higher educational institution. OCB is essential for improving organizational performance, building mutual relationships among the different departments, enhancing unity and organizational unity, and reducing the level of resource-intensive needs. However, the challenges of OCB lie with managing organizational cynicism. Cynical attitudes are present in all organizations, both public and private, regardless of whether the organizations are in the services or education sector. The concept reflects the negative feelings employees have towards their workplaces, and this provides interpretations for many unwanted employee behaviours, it is generally considered as a concept that applies to express the negative attitudes that emerge, as expressions of the conception based on the idea that no one else should be trusted. Employees who engage in cynical behaviour cannot expect to perform tasks that are not in their official job description. Organizational cynicism always turns to negative attitudes as counterproductive behaviours. The purpose of this study is to examine the reflective measurement model of organizational culture, organizational citizenship behaviour and organizational cynicism among academicians in a selected local university. This study conducted a pilot study to 100 academicians using a convenience sampling method from the selected local university. The data collected were further analysed on the reflective measurement model by applying the Structural Equation Modelling using Partial Least

Square (PLS). The finding revealed the assessment of factor loading, composite reliability, average variance extracted and discriminant validity to confirm the reflective measurement model. Concluded to the result of PLS, this study confirmed the result of convergent validity and discriminant validity is acceptable for the model. Thus, this result implies that all the loading, indicator and construct apply to the study related to organizational citizenship behaviour, organizational cynicism and performance.

Keywords: Organizational Citizenship Behaviour, Organizational Cynicism, Organizational Performance, Work-Life Balance

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## A 14 ELE 005

# Addressing Recent PISA Rankings: The potential role of preschool physical environment design quality in Malaysia

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### Abstract

Recent global PISA benchmarks of Malaysian children showed cognitive abilities remain unsatisfactory. In response to this, public preschools, specifically, Ministry of Education (MOE) preschools, have been tasked to maximise cognitive school readiness (SR) to allow for seamless transition of preschool children to primary schools. However, despite the pivotal role of MOE preschools, the design quality of preschool physical environments (PPE) to achieve this objective is often overlooked. Thus, this study aims to encourage awareness of the importance of PPE design quality to promote cognitive SR among Malaysian preschool children. A prospective cohort study and correlation analysis were conducted at MOE preschools in Klang Valley to evaluate the association of PPE design quality with preschool children's cognitive SR. 16 MOE preschools involving 336 6-year-old preschool children were recruited into the study. The CPERS5 scale was adopted to assess PPE design quality. BSRA-3 was used to measure cognitive SR. Statistical analysis revealed that PPE design quality of MOE preschools demonstrated a significant positive influence on cognitive SR. Cognitive SR remained moderate throughout the study. PPE design quality of MOE preschools was only rated fair. Among the assessed preschools, 62.5% were located in urban areas, 87.5% had one module and 68.8% only had one classroom. Predetermined aspects of MOE preschools such as location, image, safety, and

security were commendable. However, messy and physical activity areas were unsatisfactory. Play yards were the most disproportionately designed. Teacher-specific amenities were also insufficient. Conclusively, despite efforts to advocate MOE preschools as a stepping stone for better cognitive development, these institutions were still found to be lacking in terms of PPE design quality. Results from this study are hoped to encourage a much needed holistic review of the current design approach to MOE preschools in an attempt to maximise cognitive SR and improve Malaysia's PISA rankings in the future.

**Keywords:** MOE Preschool; Physical Learning Environment; Cognitive School Readiness; PISA benchmark

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## A 15 ELE 002

# Assessing a Questionnaire on Learning Environment for Autism

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### Abstract

Autistic people may appear to behave unusually, and they can meltdown when they are in difficulties situations. The impact of sensory differences in people with Autism has recognized recently. Architects and designers are responsible for providing a design that responds to the needs of all members of society. However, designers are lack awareness of sensory issues regarding the built environment in the daily life of autism before the designing stage, especially in terms of the physical learning environment for autism. This research objective is to identify the criteria of sensory design in the classroom for autism. While the study aimed to validate a questionnaire on the learning environment for autism. Before distributing a survey, the researcher refers to the expertise to check the quality of the tool. Expert (n=8) were selected based on their knowledge. They expected to review and validate a questionnaire that has five sections overall. The researcher invited six (6) experts to assess the initial 50 items in the survey. Each expert independently evaluated all details regarding the relevance, the clarity, and the understandability of the study. The pre-test of a research instrument entails a critical examination of each question as to its clarity, understanding, wording, and meaning as understood by potential respondents with a view to removing possible problems with the issue. The overall content of questionnaire including, sensory stimulation (lighting, smell, colour and visual), sensory sensitivity (sight, sound, smell, taste, touch, proprioception, vestibular), sensory design (acoustic,



compartmentation, spatial sequencing, thresholds, escape space, sensory zoning, safety, and security) and physical learning environment (accessible, wayfinding, scale, toilet accommodation, ventilation, window, quiet room, legibility, and furniture). The questionnaire is a valid and reliable research tool that can be generalized to a broader population. It is also recommended by the expert to strengthen the survey to revise and modify accordingly and send for proofreading.

**Keywords:** Autism; Validity; Reliability; Questionnaire

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## A 16 ELE 010

# Consolidated Modules in Relation to Learning Outcome of Higher Education System: An Overview

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### Abstract

Higher education is becoming a significant driver of economic competitiveness in an increasingly knowledge-driven global economy. The imperative for countries to improve employment skills calls for quality teaching within educational institutions. As higher education systems grow and diversify, society is increasingly concerned about the quality of programmes. Institutions want to be as providers of good quality higher education. It understands that competing based on research only is not sufficient to ensure the reputation of the university. As such, new ways are implemented in demonstrating performance. Mobility of students and the growth of fees increase the consideration given by students to the quality of the teaching. Hence, institutions may implement evaluation mechanisms to identify and promote excellent teaching practices. One of the teaching practices applied is the consolidated modules. Concerning the modules in the School of Architecture of Taylor's University, few modules are being consolidated between students from Architecture and Interior Design. The modules are History and Theory of Architecture, Asian Architecture, Computer Applications, and Building Construction and Material. However, the students' performance in the consolidated modules shows a vast gap between different courses of background. This paper analysed the effectiveness of the unified modules by the faculty members about the learning adaptation, which resulted in the academic performance by the students in the modules. The methodology applied in this research is a quantitative method where a total of 160 survey questionnaires was distributed among the students in the module. The outcome of this paper will help to identify

the causes and provide solutions to improve the consolidated modules in the future. Thus, it will support encouraging bottom-up initiatives from the faculty members, setting them in propitious learning and teaching environment, providing practical support and stimulating reflection on the role of teaching in the learning process all contribute to quality teaching.

**Keywords:** education; effective learning; learning outcome; higher education

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## A 17 ELE 001

# Humanizing Technology: Smartphone usage in the learning environment

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### Abstract

In the Information Era and the onslaught of IR4.0, advanced technology has impacted all walks of life. One such example is smartphones. Smartphone usage has become a fad for social interactions and gaming for most across all ages. However, smartphones can be humanized in the area of educational technology in enhancing the learning environment. Humanizing technology means putting human needs and interests; that is, technology can be customized to suit the different sectors of the population. By humanizing technology, theological considerations are set aside. For example, smartphone applications can be customized for the curriculum of the primary school students. Using smartphones as an educational technology tool is a rational and logical way for educators to respond to various students' needs. From the literature reviewed, humanizing technology allows for the shift from content delivery to identifying and addressing student needs. Also, usage of smartphones can create a safe environment for students to participate in class discussions, and to emphasize a reflective process into students' needs through personalization. Besides, many studies have shown that millennials are addicted to technology and gamification. Routing this addiction towards deep learning in the classroom would result in better student engagement. Other studies have shown that embracing and humanizing technology were crucial motivations for a successful provision of the level of care and

individualized attention in the learning environment. Hence, this paper aims to determine the influence of smartphone usage among primary school students. A mixed-method design with the quantitative part through surveys will be the first approach for primary data collection with a sample size of 150 ( $n=150$ ). Regression analysis is the predictive modeling technique used for determining the relationship between the variables. The other phase is the extensive review highlights on humanizing technology in the learning environment. The study is significant as humanizing technology can allow educations to utilize the time and space in the classrooms fully as well as to get to know the student by increasing the level of compassionate teaching. These are powerful insights for the teachers, the board of education, and the Ministry of Education to align with the country's Shared Prosperity Vision 2030. The implications of humanizing technology are new approaches that can measure learning that lies outside of traditional assessment. By humanizing educational technology, the literature reviewed has demonstrated that smartphone usage has evidenced significant student engagement in the learning environment. The ripple effect of humanizing technology of smartphone usage is in the form of digital equity and digital democracy.

**Keywords:** Humanizing technology; Smartphone Usage; Learning Environment; Student Engagement

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## A 18 ELE 008

# Sleep Deprivation: Implementation of napping stations in private university

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### Abstract

Sleep deprivation is common amongst university students, due to the burden of academic work and social pursuits. Students suffering from sleep deprivation can cause a decrease in physical and mental health, social functioning and quality of life. It can result in lower grade point averages, increased risk of academic failure, compromised learning and impaired mood, which would affect a student's daily performance. Most people severely underestimate the importance of sleep and certainly do not view it as necessary for life, on par with food, water and air for survival. When human are sleep deprived, the bodies are unable to function adequately. Adequate sleep can repair this damage, but with the many demands on university students, they may unlikely to be able to accomplish this. This paper aims to examine the impact of sleep deprivation, specifically on private university students. Three objectives were established: (i) to identify university students' sleeping patterns; (ii) to investigate how sleep deprivation affect university students' performances and (iii) to determine the potential outcomes of nappy station implementation. Case study approach was used for this research which focused on the views expressed by students in a reputable private university in Subang Jaya. Key findings show that naps are beneficial in helping reduce students' sleep debts. It also indicates that naps lead to the improvement in cognitive function, creative thinking, and better memory performance. Universities should realize the importance of naps. Several options of providing students with safe comfortable napping areas in university are discussed in this research. The implication of this research study would elevate the awareness of how severe sleep deprivation could affect university

students' performances. The implementation of napping stations could be one avenue to resolve the issue.

**Keywords:** Sleep deprivation, sleeping patterns, napping stations, private university.

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## A 19 ELE 004

# The Impact of Disruptive Technologies on Behaviour of Users and Functionality of Public Spaces in University Campus Environment

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### Abstract

Public space is a place, where informal and formal activities can take place. In a university setting, open space is a place, which students usually use to have a sense of relief in between or after classes as well as socialising with others. It is an essential component in a campus, which should provide a stimulating experience to students and other users alike. Lately, however, there is a concern that such spaces have become less frequented by students and lacking in vibrancy. This paper attempts to investigate whether the notion and functions of public space, as commonly understood have changed and the need to redefine uniquely in the advent of what is known as "disruptive technology" that seems to replace the usual way of doing things. For that purpose, a comprehensive review of literature is carried out, focusing on established theories and concepts of public space and places including the texts written by Edward Relph, YF Tuan, David Canter and Christian Norberg-Schulz. The approach of place and placelessness is described where preferences are derived and applied. In the present day, disruptive technology has emerged with a significant role in all social economic and cultural aspects. Consequently, the paper also covers some recent works related to the area of study and perspectives of disruptive technologies, which influence and alter the way people do, behave and respond towards their physical and virtual environments. The paper does not intend to be conclusive, but rather to initiate a discussion to provide some pointers for design professionals in the process of revitalising public spaces, in particular on university campuses. The significance of the understanding of the current needs as a spectrum of attributes and aspects will be of importance in



redefining theories and principles of public space. Besides, it enhances the impact of sustainable and resilient open space on a university campus for the current and future generations.

**Keywords:** Public space; campus environment, placeless, disruptive technologies

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## A 20 ELE 003

# The Observation of Sensory Design in Open Spaces of University Campus under Hot-humid Climate

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### Abstract

The global prevalence of urbanization and diminishing green spaces are shaping an unhealthy lifestyle, subsequently causing health risks on urban citizens. However, a university campus located in the city center usually has the potential to provide salutogenic open space for promoting wellbeing towards students and staff. Open spaces between buildings are universally applied in hot-humid areas for achieving indoor thermal comfort and optimizing a passive design for the built environment. Educational buildings are important venues for campus regular users' daily routines as these places are where students and staff spend most of their time every day. Open spaces between buildings are convenient to reach and easy to access. The functional use and design make these open spaces to be beneficial for students and staff to facilitate physical, mental, and social wellbeing by providing precious outdoor experiences. Nonetheless, the criteria of landscape design on improving sensory stimulation to encourage outdoor experience have not been sufficiently studied, especially from university campus contexts. Thus, this investigation aims to explore the current sensory design on selected open spaces surrounding educational buildings. The findings could, therefore, contribute to the criteria of landscape design on improving sensory stimulation by encouraging outdoor experience within open spaces in an urban university campus with a hot-humid climate. To investigate the provision of outdoor experience supported by sensory stimulation, observation on current sensory design is carried out against surrounding open spaces in educational buildings from the list of selected university campuses. Two sets of guideline forms are

applied during the process of site observations, aiming to record the general description of selected educational buildings, as well as the current sensory design in the adjacent open spaces. The expected key findings include the current sensory design on the campuses and the sensory stimulation of university campuses under a hot-humid climate. Additionally, by combining the obtained outcomes with behavioral mapping and questionnaire surveys, users' behaviors and activities, correlations between sensory stimulation, environmental satisfaction, and outdoor experience are likely to be defined. These findings will assist professionals in their design of open spaces in the future, which is parallel with salutogenic landscape and health promotion programs at university campuses.

**Keywords:** sensory stimulation, outdoor experience, open space, university campus

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## A 21 ELE 006

# The Significance of Living Heritage Conservation Education for the Community toward Sustainable Development.

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### Abstract

Living Heritage or intangible cultural heritage defined as human skills and knowledge, practices, expression, and instruments which form the transmitted practices of local people and the community. Five domains of intangible cultural heritage were 1) Language, 2) Performing arts, 3) Social traditions, rituals, and festive events, 4) Knowledge and practices concerning nature and the universe, and 5) Traditional craftsmanship. By a lack of responsibility, recognition, and knowledge, many emotions and manifestations of intangible cultural heritage are under crisis, threatened by globalization and cultural modernization. Intangible cultural heritage has risks becoming disappeared forever or freezes as a practice belonging to the past if it not raised in the community. To strengthen the intangible cultural heritage keeps it alive, preserving and passing this heritage on to future generations, and while accepting for it to transform and conform in any situation. Quality education as a Sustainable Development Goal number 4 (SGD 4) has been identified as a key priority in particular focus to investigating the role of intangible cultural heritage in expanding Education for Sustainable Development. Safeguarding intangible cultural heritage can effectively contribute to sustainable development within each of the economic, social, and environment while also it was contributing to peace and security. This paper provided the literature review as an analysis method with a rationalistic approached and discussed the

significance of Living Heritage Conservation Education for the Community. It is important to note that any efforts to conserve the intangible cultural heritage should be aimed not just at development benefits; the most important thing is to comprehend the needs of the local people. It is indispensable to promote public awareness on intangible cultural heritage conservation protection toward sustainable development using education programs to achieve the efficiency of cultural heritage conservation. In conclusion, the key a quality education, which in the Community-based Education for Living Heritage Conservation, not only fulfills people's needs but also helps link and empower both local people and the community to conserve the living heritage successfully.

**Keywords:** Community-based Education, Intangible cultural heritage, Public awareness, Quality education

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## A 22 ELE 007

# The Use of Social Media in Millennials' Teaching and Learning Activities in Design-Related Course

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### **Abstract**

In entering the new era of 2020, incorporating digital technology in teaching and learning activities has been widely practiced in higher education institutions. This method may help the process of teaching and learning for the young generations due to current students' characteristics and their learning styles. Generally, most college students nowadays belong to a generation group called 'the millennials' who were born between 1981 to 2000. The millennials are considered a 'digital native' generation because they have been living with the internet and technology since they were little. One of the main tools of communication among today's young age is social media, which refers to social networking that provides a platform for users to create and share their ideas and information with other users. This paper discusses an action research on the use of social media in millennials' teaching and learning activities in a design-related course. The objective of this study is to investigate students' feedback on their experience of utilizing social media as a platform to submit and present their assignment for a course in an interior architecture program. The method employed is a questionnaire survey on students' experience of utilizing such method after they completed the course. The respondents were also encouraged to give additional comments regarding this unconventional approach. The findings of this study show that most respondents favor the use of social networking apps in their teaching and learning activities, especially for courses related to design and creativity. Some comments mention that the students' preference is due to the ease of submission, cost-saving, and broader reach of information sharing with their social networks. This implies that digital technology,

such as social media, may enhance the hands-on teaching and learning approach in a design course, thus supports the technological method of millennials' education.

**Keywords:** Social media; Millennials; Teaching and learning; Action research

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# **Elderly Environment**





**A 23**  
**EE 001**

## **The Elderly (Senior) Housing Preferences Among Generations in Malaysia**

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### **Abstract**

The elderly needs are likely to be different from the younger population (generations) due to their age factor and health conditions. Thus, their housing preferences are also varied and unique. Ageing in place is the choice of staying in the same house or location as the person aged. The desire to 'age in place' is now recognized as an essential goal for the elderly support services design and implementation. As they age the requirements and needs of assistance for the elderly will also vary. It is crucial to be able to identify the elderly (seniors) health conditions and frailty to be able to provide support services required to respond to their desire to remain in their own home as they age. The motives of moving to vary by each age group (generations). Generation of more than 50 years old tends to be less often immobile than the younger generations. Overall, although the generations, especially the elderly, prefer to age in place and living independently, they also want to be closer to family and friends during the elderly life stage. This study aims to provide an in-depth overview of the elderly (senior) housing preferences of the Malaysian generations. The objective of this study are: (i) To define elderly (senior); (ii) To identify the elderly (senior) housing preferences features; and (iii) To determine the elderly (senior) housing preferences by different age group (generations) in Malaysia. This study adopts a mixed-method research strategy through qualitative interviews with the local authorities and

housing developers in Selangor. The quantitative approach was made via survey questionnaires on the elderly (senior) populations in Selangor. The data analysis revealed five (5) central elderly (senior) housing preferences; (i) Health; (ii) Safety; (iii) Convenience; (iv) Amenity; and (v) Community as the central elderly (senior) housing preferences among Malaysian generations. The findings of this study provide some necessary information on the preferred elderly (senior) housing preferences features and living arrangements that would be useful to the actors of property development in offering better housing options and assisting the elderly generations to age in place in without having to be isolated from the community.

**Keywords:** Elderly (Senior) Housing; Aging in Place; Housing Mobility; Generations;

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# **Green Environment**



## A 24 GE 002

# Promoting a Lower Carbon Footprint Using a Pedestrian-Friendly Model

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### Abstract

Walking has significantly contributed to a lower carbon emission of a country and offering a hand to build a healthier society in a modern era. With the aspiration of the government in providing a lesser carbon footprint zone, the initiatives of understanding the current pedestrian system are deemed crucial. Although walking improves green mobility, until today, walking is still known as the least preferred mode. Lack of infrastructure, poor environmental design, weather condition and safety features installed to support a proper pedestrian movement had contributed to a higher dissatisfaction level among the pedestrian users. Moreover, a lack of understanding of the factors contributing to the dissatisfaction of pedestrian users further worsen the problem. Thus, this study aims to improve pedestrian walkways and promote a higher level of usage in active mode by analysing the critical factors contributing to the problem faced by urban dwellers. Among the objective of the study is to examine the factors that affect the satisfaction level among the urban dwellers in promoting a lower carbon footprint in the metropolitan area. This policy is essential in designing a pedestrian-friendly model to encourage interest in active mode. The study embarks into a quantitative approach and selected 385 respondents from the current public transport users and urban dwellers. The study area only focuses on the Kuala Lumpur city centre, which includes those who live and work in the metropolitan area and falls within an active working age. The study proceeds with a stated preference survey to collect the data from the respective respondents. The study selected active

working-age as primary respondents. Data collected from the study were analysed through SPSS using the descriptive and inferential analysis. The implication of the study will assist local governing bodies by providing them with a better pedestrian design in promoting a lower carbon footprint in a metropolitan area and contributing to a healthier society.

**Keywords:** Pedestrian; Friendly; Low Carbon; Satisfaction

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## **A 25 GE 001**

# **Reviewing the Human Behaviours towards Domestic Recycling Waste among Urban Households**

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### **Abstract**

The Malaysian government has raised its concern with regards to environmental protection. One of the six (6) strategic thrusts in the 11<sup>th</sup> Malaysian Plan 2016-2020 is to pursue green growth for sustainability and resilience which, therefore, encouraging the public to practice the protection of the biodiversity. However, Malaysia is also experiencing the issue of waste disposal management, weaknesses in recycling management and enforcement, lack of 3R hierarchy practice and absence of mechanism focusing on domestic waste for recycling. Previous studies revealed that households generate more waste hence requires changes of the individuals. The aim of this paper is, therefore, to examine recycling mechanism and practice of domestic waste recycling among urban households' behaviour to construct the theory of Human Behaviour on Domestic Waste Recycling. In achieving the aim, the objectives of this review article are to highlight the issue of domestic waste management and how understanding individual attitudes and behaviours can make a significant contribution to an appreciation of what factors shape behaviour and how these might be changed. The research method applied is through content analysis of the literature to determine the trend of research in the areas mentioned. From various readings, minimisation (reduce), reuse and recovery (recycle) were classified as household behaviours. While there is no question that awareness is a crucial factor in modifying behaviour, previous studies argued that the relationship between perception and action is



complicated and that numerous other factors can intervene in the relationship between knowledge and action. Furthermore, individuals face significant barriers and motivating influences that impact on their willingness to undertake a given action and behave accordingly. Also, studies found that there are three (3) main factors that are likely to influence environmental and explicitly, waste management behaviour namely; 1) environmental values factors, 2) situational factors and 3) psychological factors. The findings from the review papers are significant in strengthening the enabling environment for green growth through one of EPU's many initiatives, i.e. enhancing awareness to create a shared responsibility. The prospect of using a social understanding of environmental problems is one that has the potential to make the realisation of environmental sustainability more tangible than ever before.

**Keywords:** Human Behaviours; Domestic Waste; Recycling; Urban Households

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## **Healthcare / Healing Environment**



**A 26**  
**HE 006**

## **“Architecting” Emotions by “Architecting” Spaces: A pilot study**

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### **Abstract**

The belief that human behaviour is shaped by the environment is not new, as acknowledged by many architects, psychologists and philosophers, despite previous non-measurable evidence. During the last decades, people started to have less belief in the spiritual dimension of human's life, but more towards believing in materialism. This has resulted in the deterioration of human life on a spiritual, emotional and biological level. One of the root causes of this degeneration is the poor quality of the built environment, in particular, the interior environment. Recent studies have shown that by the year 2030, the biggest illness we shall face is going to be depression, as most of our time spent is inside the buildings. Hence, the importance of “re-connecting architecture with emotions and brain” as an essential solution to improve the quality of life for future generations. This pilot study aimed to investigate scientifically, with measurable evidence, the relationship between neural underpinnings / cortical correlate of the brain of a person, and environments, which influences the emotional state and behaviour of a user. The objectives of the study were firstly, to identify the extent of effectiveness of the environmental and design elements upon human subjectivity and feelings; and secondly to identify the variations upon human's feeling of the various water-bodies environment. Data collected was based on the EEG (Electroencephalography) tests to BCI (Brain-computer interface). The pilot study was conducted at several water-bodies locations in the Klang Valley. The findings seemed to show that there is a contrast between different water elements like a sea versus a lake, an unobstructed view versus a small enclosed one, different colours of spaces, different natural lighting levels and the impacts of smell. Each has a disparate

impact on the human emotions. It also seemed that the water element with a free view (sea) had the most significant impact on human emotions of positivism.

**Keywords:** Depression; Neural underpinnings; Water-bodies environment; Quality of Life

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**A 27**  
**HE 004**

## **A Bidirectional Associations between Urban Physical Environment and Mental Health: A Theoretical Framework**

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### **Abstract**

Mental health problems is at alarming state. World Health Organization (WHO) (2019) in World Health Report stated that around 450 million people suffering from mental disorder and causing it become the leading for health problems and disability worldwide. Recently, the relationship between urban physical environments and mental health has received considerable critical attention to many researchers to integrate urban planning with mental health. Several studies have shown that there a possibility of a relationship between the urban physical environment and mental health problems. Consequently, the urban physical environment is important to health and wellbeing as it can influence the city's liveability, people's behavior, and can encourage or discourage a person to be active and also can improve an individual's ability to strive against an unhealthier lifestyle. Therefore, this paper is important to examine the influence of the urban physical environment on mental health. A scoping review of reviews and a search of keywords from the international literature from 1985 to 2019 is conducted in a relevant database such as SCOPUS, Web of Science and PubMed and snowballing method in the references list to get a recent paper that related. These papers are reviewed to develop a theoretical framework that identifies a relationship between the urban physical environment and mental health, the character of the physical environment and how these domains are indicated using urban health indicators. The information from 65 articles in the relevant database is synthesized. The relationship is

developed in the form of a theoretical framework for the local context. It is anticipated that this research will improve the environmental planning quality towards a healthier urban environment for the public and support the implementation of the New Urban Agenda by promoting health and well-being as the most important asset of any city. Further, the framework can be beneficial to the urban planning decision-makers to plan healthier and more sustainable Malaysian cities.

**Keywords:** Urban Physical; Environment; Mental; Health

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## A 28 HE 003

# Analysis of Sample Rejection and the Impact on Quality of Care in Patients in a Single Tertiary Healthcare Facility

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### **Abstract**

#### Background:

Sample rejection is perceived as a problem not only by the clinicians and nurses but also by the laboratory staff. For clinical staff, it means having to repeat sample collection and sending it back to the laboratory. It could lead to delay in getting the results for patients and might affect patient management, such as the decision on treatment and delay of hospital discharge, not to mention the pain associated with venipuncture. It has become a quality indicator for accreditation of medical laboratory in Malaysia, and the national target is 0.83%. Many studies reported rejection rates of 0.1% to 3.49%.

**Aims:** This study aimed to reduce rejection rates and to improve our quality of care.

**Objective:** To measure the rejection rate at our centre.

To compare the rejection rates in previous years.

To suggest tools to reduce the rejection rate.

#### Methodology:

This study was conducted at the UiTM Medical Specialist Centre. Data from the Haematology and Transfusion Medicine Unit was collected from Jan 2019 to October 2019. The cause for rejection was chosen from the options printed on the rejection form. Each rejection was recorded according to the location and type of tests requested. Analysis of data was performed using Microsoft Excel and SPSS software.



### Findings:

The blood bank received a total of 17 996 samples in 2019, of which 1430 was at the blood bank, and 16566 at the haematology workstation. The blood bank and haematology workstation both rejected 84 (5.7%) and 560 (3.38%) samples, respectively. In 2018, the unit received 20 248 specimens. The blood bank and haematology workstation reported a rejection rate of 5.56% and 2.78%, respectively. The primary cause of sample rejection at blood bank was clotted samples, and at haematology workstation, was lysed samples. Most of the rejected samples came from the wards, followed by the emergency department. The rejection rates did not improve in 2019. Based on the location of the rejected samples, medical officers were less skilled at performing venipuncture than medical assistants.

### Implications:

This study showed the need for improvement in venipuncture techniques and types of equipment. This finding suggests that the institution should employ phlebotomists to collect blood samples from all patients. Another possible intervention to improve and maintain the quality of care for patients would be to organize workshops on venipuncture techniques.

Keywords: Rejection rates; Sample rejection; Quality of care; Tertiary centre

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## A 29 HE 002

# Anxiety and Depression among Female Cancer Patients in Penang, Malaysia: Case study.

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### Abstract

**Background:** Anxiety and depression among cancer patients can affect clinical outcome thus the quality of life. Aim and objectives: This study aimed to evaluate anxiety and depression experienced by a group of female cancer patients in Penang Malaysia. Methodology: A demographic data collected involving twenty-three females' cancer patients recruited from January until March 2019. The patients were from different types of cancer who visited the daycare clinic at Advanced Medical and Dental Institute (AMDl), USM, Penang. This study utilized Hospital Anxiety and Depression Score (HADS) questionnaires which consist of 12 items where the patients need to score each item from 0 to 3. The score of 0 to 7 means no clinical symptom, 8-10 mild and 11 to 21 show that the patients experienced either anxiety or depression. After the data collection and analysis, we presented the finding in the mean and standard deviation and percentages. Finding: Mean age was  $49.2 \pm 7.21$  SD. There were 22 Malays (95.7%) and 1 Indian (4.3%) identified. Seventeen of them (73.9%) were high school leavers, while the rests were Diploma and Degree, holders. The frequency of medical check-up before the

cancer diagnosis were every three months (n=4, 17%), twice a year (n=4, 17%) and once a year (n=8, 34.8%). Some of them never go for a medical check-up at all (n=7, 30.4%). Majority of them presented with breast cancer. Most of their cancer was at stage 2 (52.2%) and the rest were on stages 1, 3 and 4. Anxiety score showed 11 of them (47.8%) were normal, n=7 (34.8%) were mild and n=5 (21.7%) were symptomatic. Only four of them (17.4%) showed a symptom of depression. There was a significant relationship of anxiety and depression with cancer stage of the patients ( $p < 0.05$ ). Implications: This study revealed that anxiety and depression experienced by some of the cancer patients. The causes of anxiety and depression were due to the late cancer stage presentation. Anxiety and depression if not properly managed may lead to poor clinical outcome and quality of life.

**Keywords:** Cancer patients; Anxiety; Depression; HADS

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## A 30 HE 001

# Overview of Fishing Activities as Therapy for University Students towards Mental Wellness

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### Abstract

In today's fast-paced life, media reports have shown the increment in individuals with high-stress levels leading to mental health issues. One outlet to reduce stress is to be physically active and be involved in sports. This paper provides overviews of previous studies and literature evidencing physical activities that have been effective in reducing stress levels regardless of age and gender. However, the type of physical activity should match the individual's interests and capabilities. In the case of Universiti Teknologi MARA (UiTM), Cawangan Selangor, several activities have been identified in ameliorating the issue of stress towards mental wellness among pre-identified students by organizing fishing activities as therapy at the many lakes on campus. The motivation for the activity came to light after several meetings with the university's Center for Occupational Safety, Health, and Wellbeing (COSHAW). The wellness committee showcased the increment in students suffering from mental wellness problems. From the reviews, the number of university students experiencing emotional disturbances leading to an imbalance of mental health has shown a significant increase. In pursuit of a high happiness index, this problem has been a cause of concern for university administrators, where the impact of attrition for problematic students may reduce the number of graduates. In countering this issue, an empirical study must be conducted later to confirm the cause of emotional disturbance and mental health issues among university students. Nevertheless, for this paper, the methodology employed

included a rigorous review of literature combined with statistical data presented at CoSHaw's meetings. The data were presented by representatives from two departments, namely the Health Center and the Counseling Division of the Student Affairs Department. Therapy fishing is advocated for students with mental challenges, unresolved emotional or behavioral issues that may be getting in the way of living a fully realized life. Another significant element of this review paper is meeting the aligned United Nation's and the university's sustainable development goals of good health and well-being. By ensuring that there are proper, early interventions for the students, it is hoped that they will be able to handle their issues and lead a quality of life that befits a university graduate.

**Keywords:** mental wellness; fishing; therapy; quality of life

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# **Inclusive Environment**



**A 31**  
**IE 001**

## **Accessibility Adaptation in the Design of Heritage Boutique Hotels: Malacca case studies**

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### **Abstract**

This paper undertakes a study on accessibility adaptation in the design of heritage boutique hotels in Malacca. Due to the challenges in preserving the tangible heritage value of historical buildings, past studies have raised the issues of lack of accessibility provision in repurposed heritage buildings. While there are many forms of historical building adaptive reuse, small-scale boutique hotels are among the most frequent ones because of their business prospects with cultural charms that other buildings or places do not possess. Three boutique hotels housed in the historical premise in Malacca were selected as the case studies of this research. The objective of the study is to explore heritage boutique hotels' methods of adapting accessibility in their hotel design. The observation was employed as the primary method of this research, which consisted of site observation and photo documentation at the selected case studies. Data for the observation were analyzed and discussed qualitatively. The researcher also did a layout analysis for each case study to locate the accessibility facilities provided and to comprehend the flow of the hotel layout. Findings indicate that all three case studies were designed with users' accessibility in mind in spite of the buildings' heritage value that they need to preserve. Accessibility facilities that are provided at the case studies include ramps, appropriate size and space for approach and use, elevator, accessible restroom, and emergency means of escape. Besides, the hotels' layout is easy to comprehend regardless of guests' first-time or past experience coming to the hotel. These positive traits of accessibility adaptation in heritage boutique hotels suggest a better development of the Malaysian tourism industry towards



accessible tourism, which may attract more extensive ranges of tourist. In regards to heritage sustainability, this study is not only concerned with the preservation of tangible heritage value of the buildings but also intangible heritage aspects, namely the usability of the premises in sustaining users' social needs.

**Keywords:** Accessibility adaptation; Heritage building; Hotel design; Boutique hotel

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# **Landscaping Environment**



## A 32 LaE 004

# Enhancing Tree Growth at Urban Streetscape: Applying tree sensitive urban design theory into streetscape design

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### Abstract

Green fabrics that comprise of roadside tree planting play a vital element in an urban ecosystem. It delivers an extensive intangible service in promoting streetscape towards a conducive environment for the users. Theoretically, consideration of developing excellent streetscape design included the availability of space, setback, hardscape and footpath clearance, service constraint, liability, and public safety. Neglecting these key factors deteriorates the quality of air and the sequestration of carbon dioxide environmentally. Nonetheless, the unhealthiness of roadside trees always brings the risk to road users due to its lower rate of durability. This might happen either due to its inappropriate roadside tree planting implementation and even during its post-execution of management practices which thus affect streetscape quality of life (QOL) in overall. Hence, this study is to gain a perspective view from landscape practitioners on their current practice and management of roadside tree planting. The data is collected through semi-structured interviews with landscape practitioners from Shah Alam Municipal Council. The expected outcome is to gain their point of view on the level of current practice on roadside tree planting. Other than that, it is also to determine how the attributes from Tree Sensitive Urban Design (TSUD) Theory can be integrated in current practice to achieve sustainable

roadside tree planting yet contributing on developing the best quality of streetscape life. In achieving target data and point of view, guided questions are prepared. Overall, this paper will serve as a discussion of non-numerical data (qualitative approach) on the potential of attributes in Tree Sensitive Urban Design (TSUD) Theory and determining the additional attributes suggested by a practitioner in enhancing current Malaysia roadside tree planting management. This approach is to ensure the internal cycle of inputs by the roadside tree as the main component and the outputs through its benefits consistently sustain the quality of life (QOL) in Malaysia's rapid urbanization development.

(307 words)

**Keywords:** Streetscape Design; Roadside Tree Planting; Tree Sensitive Urban Design Theory, Landscape Practitioner

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**A 33**  
**LaE 001**

**Exploring Neuro-Landscape Theory Interfaced with  
Pro-Environment Behaviour Theory for  
Psychological Restoration of Low Income Group**

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**Abstract**

Improving well-being for all is one of the six strategic trusts which were outlined in the 11th Malaysia Plan. Malaysia has experienced rapid growth of urban population in the last decades. Due to urbanization, there are changes in the life events, which have affected the mental health of urbanites, particularly among the low-income group (B40). Mental depression, a part of mental health, can be overcome through psychological restoration (PR) in urban agglomerations; thus, a growing need for restorativeness in the urban surrounding. Experiences with nature have been shown to have psychologically restorative effects, such as recovery from stress and fatigue and the triggering of positive emotions. The co-existence between the neuro-science and landscape is known as neuro-landscape. Neuroscience provides an understanding of how the brain controls the body activities, and behaviour and these concerns have stimulated inter-disciplinary research approaches. Human brain shows differential activation patterns in response to the landscape and is associated with emotional states based on psychology. Despite many studies on nature

and PR, hardly any studied in neuroscience and urban nature aspect, its relationship with Pro-Environment Behaviour (PEB) and PR for B40. The low-income people (B40) are those who have a median household of RM 3000. Low-income family is a high risk to suffer cost living pressures and is exposed to psychological depression. This study attempts to explore the internal and external stimuli of PEB and their connections to psychological restoration using a mix method approach. Thus, understanding the relationship between neuroscience and pro-environmental behaviour is crucial to promote psychological restoration to the low-income group and minimise the negative impact of one's actions on the environment. The findings will be beneficial to landscape and urban planners to plan for healthier cities. This interdisciplinary research involving neuroscience, landscape, behaviour and psychology disciplines will be new and innovative research to address concerns in the well-being of B40 in Malaysia. (310 words)

**Keywords:** Neuro-Landscape, Pro-Environment Behaviour, Psychological Restoration, Low Income Group (B40)

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## A 34 LaE 006

# Integrating the Typographic Landscape in Creating Interactive Spaces for a Holistic Learning Environment

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### Abstract

The aim of this research is to identify the importance of the ideas on integrating typography and landscape in campus universities. In order to solve the problem of interactive spaces that can create a holistic learning environment, an artistic approach has been developed. The design proposed is a functional Typographic Landscape installation using letters of FSSR that will become a bench for students to gather their leisure time, for relaxing, socializing, transitioning class and work together outside classes. It is a typographic installation which expressed in three-dimensional formats located in a campus open space. Particularly using very big-scaled typography boost great attention because of the seeing-reading distance and the angle of the spectator. Typography as a graphic element that is enlarged to unusual and extreme dimensions, brings up completely different functions to users (students). An integration of typography and landscape will become an interactive space for holistic learning in campus university. The university's interactive student space is a must for students to gather and interact. This reality has prompted the university management to enhance the relationship to create a more interactive environment among students. Social interactions such as debates, discussions and group work have a significant impact on student interaction experiences. Group conversations can turn into useful interactions where students share knowledge or gain new information. This idea is part of sustainable initiatives that will be beneficial to students in order to give adequate space



for students' quality of life as well as to build up an image of art (typography) on campus. A quantitative method using questionnaires survey has been distributed to 160 students from the Faculty of Art & Design (FSSR 2). Furthermore, a statistical analysis using SPSS has been done to assess the data. The result shows that most respondents agreed that Typographic Landscape will enhance the image of the faculty. They also indicated that it will be functioning very well as a communal space for students' purposes. This study will benefit many students, faculty and university campuses in the country and abroad.

**Keywords:** Typographic landscape, learning environment, campus environment, interactive space

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## A 35 LaE 003

# Reviewing Current Risk Process Integration Effectiveness Into Malaysia Landscape Architecture Project Lifecycle

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### Abstract

Landscape architecture project consists of multiple risks that would eventually become project issues later if not managed earlier, that would cause the project performances to be compromised. Risk management application needed to control these undesired risks through a risk process practice within the project lifecycle. Furthermore, although risk management is an established knowledge and vastly practised worldwide, there is a lack of study on how the risk process integrated into the project lifecycle. This study aims to review the effectiveness of current risk process application into the project lifecycle. To accomplish the study aim, an extensive review of the risk process and landscape architecture project lifecycle conducted. The application effectiveness reviewed an aspect of risk process planning, process consecutiveness and completeness of each process step within the project lifecycle phase. The study methodology engaged an exploratory case study. Firstly, data collected through an expert interview with twenty-four landscape architect professional based in the Klang Valley region. It then analyzed using content and thematic analysis approach to analysis for description codes, categorizing, build a theme and synthesize thematic map. The study found that the risk process ineffectively integrates into landscape architecture project lifecycle. First, the process practised in unplanned as risk process practice ad-hoc manner and practice start at middle project lifecycle phase.

Second, the risk process implemented intermittently as risk practised in random and non-sequential order within the project lifecycle phase. Third, risk process practices incomplete step as only certain process step practice. Hence the practice constrained the realization of risk management benefits toward project performances. Project risk realized too late in the project lifecycle and managed in an ill-structured method and usually implemented informally due to the infective integration. Moving forward, recommended for a strategy integrating risk process into the project lifecycle framework to elevate the risk management application in Malaysia landscape architecture project.

**Keywords:** Risk Management; Risk Process; Project Lifecycle; Landscape Architecture

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**A 36**  
**LaE 005**

**The Perception of Local Community in Georgetown,  
World Heritage Site towards the Environmental  
Values of Heritage Trees**

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**Abstract**

Heritage tree defined as a large, old, individual tree that attached with some unique values, which considered as irreplaceable. The urban heritage tree is the heritage tree that presents in a metropolitan area from many years ago. One of the unique values that attached to the heritage tree is environmental value. Nowadays, the rapid development and intervention among the high-rise construction of a growing historical city have become threats to the real character of the world heritage site. The impact of growth is too prominent; the presence of urban heritage trees no longer given attention. The issue is the stakeholders do not understand the importance of the environmental value of urban heritage trees in Georgetown, World Heritage Site. The stakeholders have a lack of knowledge about the role of the urban heritage trees in the urban area to the community. The existence of this precious tree is unappreciated as considered to give more adverse effects than benefits to the public. The objective of this study is to evaluate the perception of the local community towards the environmental value of heritage trees in Georgetown, World Heritage Site. The methods in this study are quantitative by using surveys technique. The data collection includes 200 questionnaires distributed to the local community. The data has been screen and analyzed by using SPSS. The result showed that most of the respondents agreed with the perception of urban heritage trees contributes immense benefits to the environmental value. The majority of the respondents admit that heritage trees have been storing a massive amount of oxygen stock because of long-lived and large-

sized. Therefore, this study is significant to protect the environmental value of urban heritage trees in the Georgetown, World Heritage Site. It is essential to conserve urban heritage trees to protect them from any act of neglecting or even demolition. This study also leads to increase awareness of stakeholders about the significance of heritage trees in the urban area.

**Keywords:** awareness, conservation, social-cultural value, environmental value

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## A 37 LaE 002

# Tree Pruning and How Knowledge Influence Tree Maintenance: Case studies of four local authorities in Malaysia

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### Abstract

Pruning is one of the most crucial tree maintenance activities, which gives a significant impact on the tree's health and structure. A well-pruned tree is not only able to maintain tree health but also will provide a safe environment and enhance the aesthetic value. On the other hand, improper pruning will give a significant impact on the tree's health and structure. Not only that, but it will also contribute to the risk of injury to property and the public. Individuals that engaged in pruning work play a crucial role because proper tree pruning will depend on pruning practices done by them. To perform a pruning job successfully, it is essential for workers to equipped themselves with knowledge. This study aims to assess pruning knowledge among Local authority tree maintenance workers; Kuala Lumpur City Hall (DBKL), Shah Alam City Council (MBSA), Subang Jaya City Council (MPSJ), Petaling Jaya City Council (MBPJ) and Klang City Council (MPK). There are 205 samples of the respondent which comprise the manager, site supervisor/foreman and subordinate (cutter) involved with pruning work. The method used in obtaining survey data by distributing the questionnaire. Fifty-eight of questions made referred on manual of Best Management Practices of Tree Pruning manual by International Society of Arboriculture (ISA), manual of Pruning Trees Landscape Amenity by National Landscape Department (JLN) and literature review. The data analysed using Statistical Package for Social Science Research (SPSS) version 21.0 descriptively based on frequency, min, percentage and inference analysis such as t-test, one-way ANOVA, and Pearson's rho correlation. Findings

from this study will identify the status of tree pruning knowledge among workers involved in urban tree pruning and will contribute to recommendations for changing knowledge for proper tree pruning which helps to raise the quality of tree management practices.

**Keywords:** Tree pruning; Knowledge; Sustainable practices; urban trees

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## **Leisure / Recreational / Sports Environment**





## A 38 LRSE 001

# Safety Awareness Attitudes among Malaysian Climbers

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### Abstract

Outdoor recreation gives different projects benefits that are ordinarily one or more prominent measures of the going with, for example, gear rental, hardware fix, retail offers of hardware, outside projects, outside occasions, and open-air exercises. Safety awareness is related to outdoor recreation activity such as climbing and hiking. The main objectives of this study is to focus on the identification of the personality of the climbers. They were divided into three aspects including the relationship between personality and responsible behavior, the relationship between personality and attitudes, and the relationship between safety awareness attitudes and responsible behavior among climbers. The method used for this study was quantitative method which involved 378 climbers of four mountains in Malaysia (Mount Jerai, Mount Datuk, Mount Nuang and Mount Ledang). They had completed the questionnaires and the data was analyzed by using Statistical Package for the Social Sciences 23 (SPSS). The result showed a high mean score for personality which is  $M=4.09$  ( $SD = 0.61$ ). The result showed high relationship for responsible behaviour and personality is between obedience and conscientiousness  $r=.55$  ( $p=.00$ ). Then the result for the highest relationship for personality and attitudes is between attitudes and extraversion  $r=.66$  ( $p=.00$ ). The finding indicated that responsible behaviour influences personality and the personality influences attitudes. It is showed that there was a significant relationship among the climbers. The results of this study are able to provide early exposure and education that will lead to pursuing a better awareness about the safe environment of the outdoor pursuit and citizen. Apart of that, this study will be beneficial for the outdoor pursuit as they can share or exchange new knowledge about safety awareness with one another. Last but not least,

it also helps to enhance the safety awareness for the community that can help the citizens to become more aware of the environment itself.

**Keywords:** safety awareness; personality; attitudes; responsible behaviour

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## **Local Cultural / Heritage Environment**



## A 39 LHE 001

# Heritage Buildings Fires: Their challenges and consideration of fire safety protection

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### Abstract

Fire safety in all buildings is a critical topic, but fire protection in heritage buildings is also of great cultural importance. Fire and the consequential damage can result in monetary losses that run into the tens of millions and even loss of irreplaceable historical artefacts. Restoring these damaged heritage buildings and items can be very costly and sometimes impossible. Devising a fire protection concept for a heritage building itself is a complicated task. Equal priority to funding and subsidies should be considered to help private owners upgrade safety features of old buildings besides cosmetic enhancements to building facades. Heritage buildings represent state of the art at the time of their construction. Materials used that are often viewed critically today concerning fire safety. Hence, the biggest challenge is to ensure optimal fire protection of the building structure and the interior (for example stucco, ceiling and wall paintings, panelling, furniture and chandeliers) as well as the historical artefacts inside a building, without affecting their aesthetic value and historical integrity. Preventive measures such as providing sufficient outdoor hose reels at minimum intervals and any other active systems can prevent untoward incidences to heritage buildings. So, for a sound fire safety concept, several considerations can be made. Hence, by reviewing two of the fire events that involved heritage buildings which are Shuri Okinawa Castle and Paris Notre Dame Cathedral, this paper is aimed to identify the challenges faced by these two-fire events and come out with the consideration that can be applied to enhance the fire protection in the respective buildings. This study uses content

analysis to study the fire event and all pieces of literature regarding the fire. Nonetheless, this paper only discusses the fire event based on gathered articles, no academics writing on the event of fire has been published. The objectives are to establish challenges faced by historical building in the event of a fire and to determine whether minimal intervention imposed in passive fire protection provided in the premises is a good practice for historic properties. The results show how both buildings are managed, and the consideration of the risk preparedness from the fire has been taken considered in its maintenance management plan.

**Keywords:** Fire Safety; Fire Protection; Heritage Buildings; minimum intervention

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## A 40 LHE 002

# Participatory Analysis on Effectiveness of Cultural Heritage towards Quality of Life: A Case Study of Royal Museum Kuala Lumpur

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### Abstract

Cultural heritage implies a shared bond, our belonging to a community. It represents our history and our identity; our relationship to the past, to our present, and the future. According to Franchi (2014), cultural heritage is not only limited to the tangibles but also the intangibles, i.e. traditions, oral history, performing arts, social practices, traditional craftsmanship, representations, rituals, knowledge as well as skills transmitted from generation to generation. It reflects the heritage and quality of life from generation to generation. Hence, the museum depends on its architecture, furnishing and artefacts for the appreciation of the significant values. Artefacts are objects and serve as the principal media for the formation, expression, and confirmation of human relationships. Thus museums are mines of knowledge about the workings of human societies. Historians and museum scholars discover narratives within their collections and extract their meaning for visitors by applying effective exhibition strategies to the museums. Among the artefacts that are commonly used for appreciation are photographed. Through photographic means, visitors would be able to learn of the building's history and historical events that took place in it and people who had lived in the building. Currently, there is no local research to study the visitors' responses towards photographic display in a house museum, a study that can help to enhance the appreciation of the significant values of a conserved building towards the users. The lack of recognition could lead to the neglect and deterioration of a conserved



structure. Therefore, this research investigates the effectiveness of photographs in enhancing, creating attachment and appreciation towards memories of historical events which took place in the former National Palace, now known as the Royal Museum Kuala Lumpur. The purpose of this research is to study the effectiveness of the use of photographs for the appreciation of the house museum from the visitors' perspective. Data were obtained primarily from the survey questionnaire of more than 360 visitors to the museum. Research findings provide recommendations to museum curators and administrators for better decision making on the utilization and display of photographs in the Royal Museum and other museums in general.

**Keywords:** heritage; preservation; museum; users' perception

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# **Natural Environment**



## A 41 NaE 003

# Forest Conservation In Bukit Relau, Penang: A visitor's perspectives

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### **Abstract**

This Forestry contributes to an infinite value of biodiversity, providing a landscape visual quality and known as an essential element to prolong the life cycle of every aspect of the living organism in the forest and its surroundings. Moreover, conservation in forestry is an act to maintain the existence of flora and fauna in the world to balance the ecosystem between humans and nature. The human activity in the forest leads to destruction directly and indirectly. Therefore *this paper aims to identify visitor's perspective about the forest condition, awareness, and their knowledge towards forest conservation through forest quality. The study will access seven (7) pillars of forest quality, namely a variety of attractions, pleasant setting, well signpost walk, trespassing issue, feeling unease and insecurity, the right place for social activity, and feel close to nature. The study area meticulously chooses base on two main reasons, namely easy access, and financial barrier.* Bukit Relau or Relau Hill locates at Relau under the state of Penang. Relau surrounded by a few mountains, namely Penara hill forest reserve, Kukus hill, Bakar Arang hill, and the greenbelt area, is connected up to Penang Hill. It is very suitable for ecotourism activity, namely sightseeing, birds watching, hiking, jungle tracking activities, and other related product. A group of visitors visiting the sites count base on the week's day at 50% and the weekend at 50%. The visitors at Bukit Relau Hiking trail randomly chooses. A set of the questionnaire used as an instrument to collect necessary data, namely, demography profile and their perspective point of views at Relau Hill Forest. A total of 96 questionnaires returned. Following screening and cleaning of the data, only 88 completed surveys use for the analysis. Frequency, mode, median, cross-tabulations, and Kruskal-Walis test is a core mediator to interpret and strengthens the research finding. Preliminaries result revealed

from two (2) significant areas of study, namely visiting purpose and the forest quality. Visiting propose result initially indicates that jungle tracking (55.7%) leads, followed by hiking(23.9%) and birds watch(14.7) as well as the lowest sightseeing (5.7%) that the highest agreeable subject by visitors on impressions is a feeling close to nature (98.8%), followed by trespassing issues (96.6%), and the lowest percentages are the variety of attraction (87.5%). The overall agreeable pattern suggested that no require further analysis of the result due to the consistency perception among the respondents. *The significant finding indicates that most of the respondent is aware of the required quality in the forest. Moreover, respondents' minimum agreed level according to the seven pillars mention is more than eighty percent agreeable. This study provides reasonable opinions from visitor's perspectives towards the research objectives.*

Keywords: Forest Conservation; visitor's perspectives;

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## **A 42 NaE 001**

# **Nurturing Community Engagement in Coastal Erosion Risk Management in Kuala Selangor, Malaysia.**

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### **Abstract**

This study is dedicated to foster community engagement in coastal risk management in Kuala Selangor, Malaysia. For many years now, the coastal areas in Peninsular Malaysia have been experiencing immense issues that mostly relate to coastal erosion. Various initiatives were executed to reduce coastal erosion and damages, hence reviving its natural environment and bring back ordinary life and activities to the local communities. However, despite the many efforts to overcome the problem, fighting natural disaster causes is still challenging. This study, therefore, aims at examining the local community's beliefs and perception of protecting the coastal zone within their living area and seek their potential role in protecting their coastal areas. The objectives were to evaluate the impacts of coastal erosion and to formulate a prototype tool kit for public participation in assisting the local authorities for coastal risk management. For those reasons, a case study method was employed, using the Pantai Jeram and Pantai Remis in Kuala Selangor as the case study. A questionnaire survey which operates a non-probability sampling, and exercises a purposive sampling was applied since the study is intended to investigate the local people in the specific study area. A total of 212 residents from Pantai Jeram and Pantai Remis were selected as respondents. Also, a focus group discussion involving 27 representatives from the related local agencies and residents was performed. Site observation was carried

out too to evaluate the impacts of coastal erosion. Results demonstrated severe damage to coastal area which is currently undertaking progressive recovery schemes. Although the state and local governments had taken various measures to protect the coastal areas, natural causes of coastal erosion in Pantai Jeram and Pantai Remis will not end. Nevertheless, the local community felt their obligation and realize the importance of protecting their natural environment. The beliefs and recognition of self-belonging to the area had indicated the need to formulate a tool kit for public participation in protecting the coastal zone and an Action Plan for the local authority to furnish the current practice of coastal risk management. The outcome of this study, therefore, facilitates the local government with an Action Plan, as well as a Prototype Tool Kit for the local people, which addresses the role of the public, programs, and activities for public participation in protecting their coastal area and thus encouraging sustainable living environment.

**Keywords:** Coastal Zone; Coastal Erosion; Costal Risk Management; Community Engagement

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## A 43 NaE 004

# The Issues and Challenges of Flood-Related Agencies in Malaysia

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### Abstract

Malaysia experiencing floods every year and the disaster are considered as 'annual event' in Malaysia. Often the disasters lead to loss of belongings, victims have to evacuate to shelter and sometimes it can be fatal too. Yet, there is no major investment from the government for massive flood prevention measures. This paper argues that there are many hidden challenges in flood-related government agencies (National Disaster Management Agency, Local Authority, PLAN Malaysia, Department of Irrigation and Drainage, Civil Defence, Fire and Rescue and the Police Department). Therefore, this paper aims to identify the real issues and challenges of flood agencies in Malaysia. Data collection was by a structured interview with government officials from flood-related agencies and supported by a comprehensive literature review of journals and government reports. Expository and qualitative analysis were constructed to identify the real issues and challenges faced by government agencies during different phases of the disaster cycle (prevention, preparedness, response and recovery). Our analysis found that flood governance in Malaysia is focusing on response operation rather than prevention since it is cheaper. Thus, the local authority will overrule any decision of flood prevention by Department of Irrigation and Drainage Malaysia and PLAN Malaysia, and go for profit-oriented development (often in the flood-prone area). This proves a clear conflict of interest between flood-related agencies, especially in between the Department of Irrigation and Drainage, Land and District Agency and Local Authority. There is also limited capacity to exploit positive result in flood management due to lack of funding and limitation of power. Other than that, the study found overlapping of function in between agencies, and lack of



support from the federal government as the main issues and challenges faced by the government agencies. Also proven by this study, political influence affecting flood management in Malaysia, especially in terms of the land rights of flood-prone area and relief operation. By identifying the issues and challenges in flood agencies Malaysia, this study hopes for improvement in flood governance Malaysia.

**Keywords:** floods; flood management; challenges; government

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# **Residential Environment**



**A 44**  
**RE 001**

**Comparative Study of Thermal Comfort in  
Living Room of Terraced House with  
Different Frontage**

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**Abstract**

A terraced house is the most popular house type among Malaysians, mainly due to its affordable price. It could be of one (1) or two (2) story types, usually build in one (1) row consisting of 12 to 16 units per block. The nature of the design whereby they shared the common party-walls on both sides (except for the end units), hence, each unit has only two (2) sides of the wall for openings (doors and windows). Windows are essential to provide view and for ventilation as well. House frontage is an essential aspect in house design, not only for aesthetic purposes but also to ensure comfortable, safe, and healthy living for the occupants. The size of the frontage wall usually determines the size of a house, and a more prominent frontage offers better flexibility of space organization. The living area or room is the essential space in a house, for the majority of the occupants regularly uses it. The temperature and humidity of the living room were measured and calculated in four (4) terraced house samples of various frontage dimensions, two (2) in Puncak Alam and another two (2) in Kota Damansara to provide information on the thermal comfort of the occupants inside the living room of the respective unit. The u-value and dimensions of the house frontage were also measured to evaluate the influence of the wall to window ratio (WWR) towards the internal thermal comfort of the house. The data collected by recording the temperature and humidity level using HOBOWare Data Logger and Anemometer for the air velocity, air volume, and surface temperature of the frontage wall. The data then evaluated using CBE Thermal Comfort Calculator and tabulated in tables and graphs for

easy comparison and deduction. The study shows that the temperature and humidity level in the living rooms with a more prominent wall to window ratio had the lowest thermal comfort levels; hence, the occupants felt very uncomfortable. Besides the WWR, the placement of the windows and the shading devices also play an essential role in reducing the sun exposure of the frontage wall and able to control heat transfer into the interior space and increase the indoor thermal comfort.

**Keywords:** Frontage; Thermal Comfort; Wall-to-Window Ratio; Sun Exposure

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# **Sustainable Environment**



## A 45 SuE 001

# Sustainable Campus Income Generation Initiative and Social Entrepreneurship at a Public University

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### Abstract

Campuses with substantial acreage have the advantage of biodiversity, populace, and facilities that would allow the initiation of multi projects for income generation and sustainability. Initiating activities and projects that leverage the campus facilities and workforce can lead to sustainability and wellbeing among the populace. Therefore, the paper narrates the double-phase events involved in the change process aimed at embedding concepts of sustainable income generation through social entrepreneurship by engaging the university students and staff. In the case of Universiti Teknologi MARA, Selangor Branch (UCS), the income generation initiative was through leveraging one of twelve lakes on campus. All the lakes have tilapias and other indigenous fishes. For this particular activity, the lake at Alam Bina section was the focus as the tilapias have grown to maturity. Realizing the opportunities available for generating income, four departments joined forces to net the fishes and convert them into a local, fermented side dish known as pekasam. Prior research on the viability of the project indicated positive outcomes and impacts. For the first phase, fifty-seven students from the culinary program of the Faculty of Hotel, Tourism Management (FPHP) were given exposure on how to scale and clean live fishes harvested by the staff from the Facilities and Campus Police departments. Three lecturers from FPHP instructed the students on how to properly cleanse the fishes in readiness for the *pekasam* fermentation process. The second phase was the post-project activity, which required the students to give feedback on their perception of pekasam production. Data were collected through an online survey form. Therefore, the paper also



aims at evidencing the sustainable generation initiatives and social entrepreneurship undertaken by UCS's staff and students. The combination of narrating the holistic approach and strategies in achieving a viable endeavor, as well as the empirical evidence from the activity, indicated the benefits of sustainable income generation through social entrepreneurship for the university. The findings showed that leveraging on the built environment of the campus provided sustainable, profitable initiatives through organic fish farming for pekasam production. Moreover, the literature on pekasam production has been positively associated with the economically sustained venture for small to mid-scale businesses. The significance and impact of the program combined with the embedded, live laboratory research on student satisfaction with social entrepreneurship proved that these activities provided for a team event and collegiality that enhances wellbeing among the students and staff at the university.

**Keywords:** sustainable generation; social entrepreneurship; income generation; campus wellbeing

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**A 46**  
**SuE 002**

**The Adoption of Sustainable Facilities  
Management Practices in Organisations:  
A Study of Malaysian Universities**

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**Abstract**

Globally, there is a growing trend among organisations towards promoting sustainability as an important business strategy due to a high level of awareness about the impacts of their operations on society and the environment. Sustainability at the organisational level refers to enhancing the firm's profitability, pursuing ethical business practices, creating sustainable jobs, and meeting environmental and social needs. This approach makes good business sense because it increases the efficiency, effectiveness, and accountability of the business operation. Organisational efforts to adopt sustainability into facilities management (FM) practice have been reported in numerous publications and have a huge influence on organisational success in terms of reducing cost, improving efficiency, increasing safety and health, and expanding the value of an investment. This paper aims to promote the implementation of sustainability in facilities management practices in an organisation focusing on universities. Two objectives: (1) to measure facilities manager's (FMs) knowledge and understanding about the sustainability in FM practices; and (2) to determine sustainability initiatives implemented in university FM practice based on the different dimension of the triple bottom line. Six-teen (16) interviews were conducted with the Heads of Department and those at senior managerial level in four (4) selected universities organisation. Under 'knowledge and understanding' of sustainability practices in university

FM, eight (8) relevant themes identified, and the dominant captured statements by universities were 'promoting the green building certification,' 'water conservation,' and 'design considerations.' Among the three different sustainability dimensions, environmental sustainability was widely focused on having higher priorities for energy efficiency, waste reduction, and water conservation initiatives. In terms of economic sustainability, the study revealed much more limited information from universities with only a few initiatives that were mentioned, namely, consideration of the cost reduction, engaging local contractors, and utilizing local products for undertaken projects. Besides, five (5) social initiative themes emerged which were relevant to social sustainability, namely, participation and involvement of the community, increasing human capital, and occupants' health and safety. These results provided some explanation and understanding of the overall picture of the study about university commitment towards sustainability in facilities management. Overall, a single organisation such as a university on its own cannot be responsible for making globally sustainable; however, each organisation can examine its inputs, outputs, processes, and effects on the larger system in which it operates. Indeed, the commitments and participation are needed from both private and public organisations toward achieving a sustainable world.

**Keywords:** Sustainable Facilities Management; Malaysian Universities; Sustainability; Facilities Management

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## **Travel / Transportation Environment**



**A 47**  
**TTE 002**

**Democratic Street: An application of space syntax  
in testing the spatial justice among women  
pedestrian**

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**Abstract**

Streets are grounded in the notion of public use and playing larger social, economic and ecological roles in the city. Greater emphasis has been placed upon these social environments where people from all ages, genders, and ethnic background can socialise, and feel safe. Street increasingly recognised that effective urban public spaces are crucial to social democracy, mobility and the urban economy. This surely underpins that direct value of what a diversity street can provide in an urban realm. However, the transformation changes the characteristics – isolated, loss of sense of belonging, and feeling unsafe. The essence of this research, therefore, seeks to examine the quality of streets after been transformed as a touristic area and evaluate the public life among women – the changing of feeling safe and unsafe. The research focuses on women activities, and attempt to evaluate the public life among women by observing and Axial analysis models are combined into Space Syntax to hypothesise the effect of grid layout on street livability and sociability. The idea of this comparative exercise is to explore women perceptions on spatial justice in Kasturi Walk, Petaling Street and Medan Pasar. Two (2) parameters in Space Syntax were chosen including global integration and local integration to measure how women use the space. The result of this research discovered that there is a correlation among these parameters with the following spatial configurative analyses; all lines analyses and segment based angular analyses. It finds significant relationships between global

integration and local integration, and women feel and how they use the street space in Petaling Street, Kasturi Walk and Medan Pasar; they only passing by the streets, business activity, shopping, leisure and socialising It is proposed in this research that more integrated streets, which are more accessible from other streets, are likely to attract more women pedestrians, while less integrated streets cannot easily be reached attract fewer women pedestrians because of the feeling of unsafe. In this sense, Space Syntax is useful to provide a better understanding of the role of the street network in supporting public life because it deals with both spatial and functional aspects of street space.

**Keywords:** Democratic street, Spatial justice, Women, Space Syntax

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## A 48 TTE 001

### Drivers' Attitudes on Campus Roads: A Review

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#### Abstract

Driving safe while keeping to the traffic rules and regulations on roads, highways, streets, and lanes should be applied everywhere. Similar attitudes are expected for the university populace when driving on campus roads. For the university citizens, commuting on campus for students and staff is a daily occurrence. The traffic flow depends on the ongoing semester. During these times, heavy traffic is observed on campus, with minor accidents occurring every week. However, the number of accidents reported on campus contradicts the drivers' attitudes. The drivers are the staff, students, and other stakeholders at the university. Thus, the paper reviews the literature on why traffic congestion and accidents occur on campus with a focus on drivers' attitudes. The scope of the student will be the students, staff, and other university stakeholders who regularly enter the campus area. The approach for this paper is more of a literature review with narratives and descriptions of the campus topology. Each university campus has its unique landscaping, architectural designs, and road infrastructure. In reviewing pertinent literature, the methodology employed will be by setting parameters to the relevant word and terms in the online database searches. The analyses and interpretations of the literature were through systematic identification of themes and variables. The sources were from book chapters, journal articles, and technical reports available on the online databases subscribed by the university. Additionally, theoretical reviews were conducted to examine and correlate relevant behavioral theories. In doing so, this exercise will help establish appropriate methods in explaining new or emerging research problems. Moreover, the findings from



the investigation will allow the university administrators to consider alternative remedies and non-traditional transport patterns to alleviate traffic congestion on campus roads. This study is significant as the model as a solution for campus traffic system can be applied for other university campus communities in Malaysia. The implications of the study will be the provision of cost-benefit analysis for future campus transport systems planning and implementation for the country.

**Keywords:** Campus traffic; Driver attitude; Transport system planning; Driver behavior

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## A 49 TTE 005

# Human and Animals Conflicts: A case study of wildlife roadkill in Malaysia

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### Abstract

Nowadays, rapid development in the construction of roads and highway in Malaysia has significantly crucial for the economic growth of the country. This infrastructure is vital for people to commute from one place to another easily. However, the adverse effects of this road development are wildlife roadkill. These conflicts between humans and animals have been a challenge, as this wildlife needs to find new habitat and their source of food. In this case, the animals need to migrate or move for their survival. This paper aims to review wildlife roadkill data from PERHILITAN and arranged it under several groups of species. The results have shown that the number of wildlife roadkill recorded in Malaysia was 1,916 from the year 2011 to 2016. Wildlife roadkill continues to increase to 2,444 from the year 2012 to 2017. Here, quantitative analysis on the roadkill data is used to select one species as the primary subject based on data given by PERHILITAN. In this case, Malayan Tapir has been chosen as the primary subject. The unit price of this species is valued based on the maximum penalty according to Act 716. Here, the value of wildlife roadkill losses is calculated in Ringgit Malaysia. It has been observed that Malayan Tapir has involved in 68 vehicle collisions with the human while crossing the road. The number of animal's death due to this accident has given a total loss of RM6.8 million in 5 years from the year 2012 to 2017. From the results obtained, long-term mitigation measures have been addressed in this study. The facilities along the road and highway need to be upgraded and taken into accounts. Several factors such as salt lick, electrical fence, lookout tower, surveillance camera and suitable plant need to be installed to reduce the numbers of wildlife roadkill in

the future. Moreover, Green Concept eco-viaduct or eco-bridge need to be designed to suit the wildlife requirement and necessities. This sustainable approach is crucial to stabilize the wildlife ecology, nature and habitat.

**Keywords:** human; road construction; wildlife; roadkill; mitigation

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## A 50 TTE 006

# Parking Spaces in Taylor's University: Problems and solutions

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### **Abstract**

Parking is an essential component of the transportation system. It is increasingly becoming a necessary aspect of transportation planning. Hence, parking facilities are a high cost to society, and parking conflicts are among the most common problems facing by designers, operators, planners and other officials. Proper site selection for public parking spaces not only increases the parking efficiency, but it also decreases limited car parking and so results in an increase of streets' width and traffic fluency. In the absence of adequate parking facilities, the vehicles are parked on the side of the road leading to a significant bottleneck in the smooth flow of traffic. Concerning Taylor's University, the utilization of parking can influence the number of parking needed. This includes parking used by staff, students and visitors on the campus. As a result, insufficient parking spaces provided brings many problems to the campus society as well as to the environment such as congestion, high accident rate; shortage of parking spaces, low air quality and high maintenance cost to maintain the transportation infrastructure and facilities. The objective of this paper is to evaluate the satisfaction of the parking facilities provided by Taylor's University hence proposing a solution to the issue. The methodology applied in this research is a quantitative method. A questionnaire survey was distributed among 381 respondents which consist of four parts; respondents profile and background, level of satisfaction of demand for parking space provided, the performance of the parking facility provided, and solutions for the issues. The outcome of this research is to benefit the student and staff that are driving and park their vehicles at Taylors University parking facilities. The improvements that are

proposed should increase the capacity of the staff and students parking. Moreover, the development of the parking condition of the students and staff parking zones will benefit the student and staff at Taylors University in the future.

**Keywords:** parking; sustainability; facilities management;

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**A 51**  
**TTE 003**

**Pedestrian Crossing Behavior Model Based on  
Human Factor.  
Case Study: Shah Alam City, Malaysia.**

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**Abstract**

Study on pedestrians crossing behaviour in urban areas is comprehensive and has provided some useful insight into the role of road, traffic and pedestrian characteristics on pedestrian crossing decisions, their compliance with traffic rules and the related safety. Despite a strong emphasis on pedestrian behavioural studies, the connection between pedestrian behaviour and human factors minimally been explored. This study aims to develop models for pedestrian crossings behaviour based on road traffic and human factors. For this purpose, a questionnaire was distributed to 663 Shah Alam pedestrians. Respondents were asked to fill out a questionnaire on their travel motives, attributes of their skills, perceptions of risks and attitudes concerning walking and road crossings. Out of the modelling analysis, the results showed that there is a significant relationship between the Human Factor and the Crossing Behavior. This study identified two components of the Human Factor that influenced the behaviour of the pedestrian crossing, namely the "risk-taker" and the "rule-follower." Depending on the 'path coefficient' of human factor analysis, this study concludes that the 'risk-taker' variable has contributed more to Crossing Behavior. Analysis of pedestrian crossings behaviour in urban areas can help to understand how pedestrians interact with the road and traffic system, as well as with other pedestrians. It may also help to understand how they balance the need for comfort and

safety at the risk of delays within the context of existing traffic laws. The application of data on human factors in explaining the motives, desires and expectations of pedestrians emerges as an effective approach to crossing behaviour model. The findings of this research can be used to evaluate the implementation of the new pedestrian crossing and to redesign the existing pedestrian crossing environment.

**Keywords:** pedestrian crossing; pedestrian crossing behaviour; human factor;

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## A 52 TTE 004

# The Development and Validation of Pre-Driving Assessment: Attitude towards safe driving scale

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### Abstract

The number of fatality due to a road traffic accident (RTA) has increased for the past few years. To date, on average, 19.59 people were died every day due to RTA, and the majority was among young Malay adult. Many reports have clearly stated that human factors contributed to up to 97% of RTA. This scenario creates concern from many agencies, including health care professionals about the fundamental issue of this phenomena. There was considerable public concern about assessment and intervention used by the enforcement body in Malaysia, where the outcome seems to be stagnant and to hope for the Ministry of Transport to look into this issue. Due to that, this study believes establishing proper outcome measure in identifying risk driving behaviour is essential. This study aims to develop a psychological assessment that will enable to assess Malay young adult attitude towards RTA. This study was involved sequential mix methodology approach. A one-to-one semi-structured interview was conducted, involved three experts, two accident witness/victim and six victims. The verbatim transcripts were analysed by using six steps Interpretative Phenomenological Analysis. Six super-ordinate themes emerged that describes the expert views, victim and witnesses experiences towards RTA. Themes and sub-themes that emerged from the interview later translated into 46 attitudes based questionnaire, namely; Attitude towards Safe Driving Scale (ASDS). The stem of the 46 questions was based on the themes and sub-theme. A total of 694 Malay young adult age



ranged 18-36 years old had involved in the final study. The factor analysis was carried out to determine the validity and reliability of the assessment (Cronbach alpha .887). Each super-ordinate theme contains three to thirteen questions after undergoing a factor loading analysis. The mean cut off for six domain, and the total score was also identified (D1: 45, D2: 36, D3: 32, D4: 20, D5: 12, D6: 9 and Total: 157). This assessment found to be adequate in providing the standard means of risky driving behaviour based on the cut off value. The ASDS also found to be valid and reliable in assessing the attitude status at an individual level. Face and content validity testing showed good coverage of the driving skills. Construct validity testing produced six important domains which show a high level of efficacy. As for the conclusion, the development of ASDS showed acceptable levels of reliability, construct validity, and criterion validity to recommend its use in assessing safe driving attitude among young Malay adult.

**Keywords:** Occupational science; Pre-driving assessment; Functional activities; Driving rehabilitation

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# **Urban Environment**



**A 53**  
**UE 004**

## **An Overview of Creative Placemaking as an Enabler for a Sustainable Urban Regeneration**

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### **Abstract**

Urban design nowadays is challenged by the contemporary idea of regeneration suggesting the creation of sustainable places, with a distinct identity, social cohesion, economic prosperity, protection, and the promotion of cultural values. Alongside these interventions, creative placemaking emerges as an evolving field of practice that intentionally leverages the power of the arts, culture, and creativity to serve a community's interest while driving a broader agenda for change, growth, and transformation of cities and places. The concept of creative placemaking supports the Sustainable Development Goals (SDG 11), which promote an environment that is inclusive, safe, resilient, and sustainable. Topics discussed in this paper emerged from the issues of sorely lacking on the knowledge of urban design as key consideration in creative placemaking. This paper reviews the concept of creative placemaking as an approach to urban regeneration, where the theories extracted from literature and other relevant sources in the field of planning and urban design. It is crucial to have proper documentation that describes various strands of creative placemaking, how it works, and what tensions it navigates towards achieving successful creative placemaking and better functional city. Drawing upon the results to attain the benefits of creative placemaking, as indicated in the literature, this paper elucidates a more comprehensive understanding of how creative placemaking works subjected to the social attributes of urban design. The findings provide an understanding of the significant function of social attributes of a place that would substantially aid planners and other decision-makers in crafting strategies in the creation of successful creative placemaking.

**Keywords:** Urban regeneration; Creative placemaking; Urban places; Social sustainability

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**A 54**  
**UE 006**

## **Community Gardening as a Restorative Environment Component and its Potential in Improving Urban Social Cohesion through Place Attachment**

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### **Abstract**

There is a need to create a sense of belonging and solidarity amongst people in urban areas to contribute to achieving sustainable cities and communities. Majority of the urban population lives a repetitive lifestyle which leads them to suffer from the extinction of experience and social exclusion. Urban areas have mostly become depauperate and homogenised. Therefore, this study aims to investigate how community gardens could act as a restorative environment component and its potential in improving urban social cohesion through place attachment. The objectives are (a) to analyse the capability of community gardens to act as a restorative environment component, (b) to investigate the community gardening participants' place attachment and (c) to examine the impact of participating in community gardening to their social cohesion. This study uses a literature review and questionnaire survey methods to analyse the capability of community gardens to act as a restorative environment component. The same methodologies are going to be used to investigate the participants' place attachment and its impact on their social cohesion. The sampling techniques for the study is purposive sampling, with a 95% confidence level. Validating the findings of the literature review and questionnaire survey methodologies use focus group discussion. The study's expected findings are to contribute evidence supporting the incorporation of community gardens into urban green spaces policy strategies aiming to encourage social interaction and cohesiveness of the society. It

is a prediction that community gardening can unite urban people of different demographic backgrounds as it increases place attachment; improving place belongingness and neighbourhood attachment, thus improving their human health and wellbeing. Community gardening can be tailored into social learning systems to increase ecological literacy amongst the urban community as it fits the narratives of fascination components of the restorative environment. The participants are expecting to have more willingness to engage in environmentally sustainable behaviours. It is a hope the findings of this study could mitigate the urbanisation dilemma by localising the SDGs no 11 through recognising community gardens as part of urban green spaces intervention strategy. Community gardens aim to establish personal connections of people with nature, thus increasing the tendency of the participants to be pro-environmental behaviourists. The vision for community gardens is to create meaningful interactions with people and nature to contribute to Shared Prosperity Vision 2030, calling for the uniting people despite differences in ethnicities and culture by participating in community gardening.

**Keywords:** pro-environmental behaviour, fascination, reconnecting to people and nature

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**A 55**  
**UE 005**

## **Deterrent Factors in Urban Farming Participation**

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### **Abstract**

Urban farming is the practice of cultivating, processing and distributing food in or around urban areas. Farming in urban areas also recognized as a sustainable approach towards the provision of food. It is also one of the solutions to the problems of high living cost and urban poverty problem. Although growing food in the cities is not a new concept, but urban farming is relatively a new trend in Malaysia and has increased in over recent years. This movement is supported by National Agro-Food Policy 2011-2020 and National Landscape Policy 2011. As urban farming remains to be promoted by municipal governments and others, it is essential to understand how to ensure these projects are viable. Despite the efforts of the government for a greener environment, there is still a lack of participation in the urban farming program in Malaysia. This study was conducted to identify the deterrent factors that hinder the "community buy-in" in the urban farming projects and how to overcome the problem so that "community buy-in" in the urban farming project will be achieved. Based on the findings, initiatives will be recommended to overcome the deterrent factors. The survey participated by 210 of respondents from a selected area in Shah Alam. Out of 210 respondents, 80 (38.1%) were male, and 110 (61.9%) were female. This study found that the top three of most deterrent factors to participate in urban farming was land and environment factor (total mean=3.37), closely followed by time factor (total mean=3.35) and the third place was knowledge (total mean 3.20). Meanwhile, this study also found that respondents suggested for implementing the design and planning in the garden to enhance



the image and aesthetic value of the neighbourhood in order to attract the interest of the community in urban farming. This suggestion was the highest-ranking (mean=4.51) compared to other suggestions. (304 words)

**Keywords:** Urban Farming; Deterrent Factors; Participation; Community Buy-In

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**A 56**  
**UE 003**

## **Smart Community for Quality of Urban Life (QoUL) in Shah Alam, Malaysia**

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### **Abstract**

Smart cities and smart communities are significant to enhance the lives of the citizen. Building creative communities could help to support governments' aspiration in improving the Quality of Life (QoL). In the built environment context, a smart city is an interconnected city, technologically equipped using big data and artificial intelligence to improve the life of urban communities. Meanwhile, intelligent communities are members of government, business, education, healthcare, security and residents that can understand the potential of information technology and make a right decision to use that technology to improve the life in dimensions of the social, economic and physical environment. In Malaysia, Smart Community International Network (SCIN) launched in 2003 aims to excel in promoting, facilitating and monitoring smart community development in various urban areas through their significant functions. However, the efficiency and future importance of smart community strategies are still unclear and undefined. Hence, the first objective of this paper is to explore various models of creative community based on smart city models from 10 countries (i.e. Malaysia; Singapore; Japan; Korea; Hong Kong; Taiwan; United States of America, United Kingdom, Netherland and France). Secondly, is to investigate critical strategies of the creative community in the urban area of Shah Alam. An initial survey among populations in the three different groups: administrative (government), education, and healthcare was conducted. The purpose is to identify the utmost critical strategies for the smart city in the urban area of Shah Alam. The findings revealed thirty variables of smart community strategies from the various models. Secondly, the results revealed that it is significant to have seven critical strategy for the creative community in the urban area of Shah Alam. These are empowered community in the social, economy and physical;

community access to leverage digital community public services; community cohesion by mobile application; participation of the population in the online portal; a society with high social connectedness; community participation in decision making and community collaboration. The results of the study could improve the Quality of Life (QoL) of the urban community in Shah Alam.

**Keywords:** Smart community, smart city, Quality of Life (QoL).

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## A 57 UE 002

# The Blue-Green Urban Living Labs of Kuala Lumpur

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### Abstract

Most cities in the 21st century are facing rising urban complexity and striking societal challenges. Hence, there is an increasing demand for cities to be innovative and inclusive, yet more adaptable to the needs of urban citizens. The Urban Living Labs (ULLs) strengths and popularity stem from its real-life setting, citizen empowerment and fostering innovation and experimentation. In the Malaysian context, despite its benefits to climate change adaptation, enhancing quality of life and urban biodiversity, the Blue-Green Infrastructure (BGI) has not been well incorporated into the ULLs. This paper seeks to address this gap by exploring the potential of the Blue-Green Urban Living Labs (BGULLs) to navigate and co-create visions towards a more provisional and adaptive understanding complex city environment. Sungai Bonus which is one of the Sungai Klang's eleven (11) major tributaries that flows within major landmarks including Wisma Bernama, National Library, National Heart Institute, National Art Gallery, PULAPOL was selected as a case study. A nature-friendly riparian zone along Sungai Bonus would turn this river into a perfect setting for BGULLs. The BGULLs in this study focuses on socially oriented urban living labs, which characterized by community participation and inclusive decision-making through public-private-citizen partnerships. Versatile tools such as Google form and Instagram were used as a platform to circulate the questionnaires that are organized along two thematic blocks. The first one focuses on the state of the BGULLs through the lens of governance, which targeted respondents from government and non-governmental agencies. Workers and users of several significant landmarks in the vicinity of Sungai Bonus participated in the survey of the second block questionnaire that covers several aspects related to the

potential of the BGULLs as innovative public spaces. Findings of this study suggest the BGULLs offer beyond beautification works. This approach is beneficial to bring citizens, practitioners, decision-makers and researchers together and jointly develop innovative solutions for urban sustainability.

The contribution of this study lies mainly in voicing the virtual idea of the ULLs into a real setting that can be used and experienced by users. The early involvement of users and other actors also reflects social implication and value of the public-private-citizen partnerships.

**Keywords:** Blue-Green; Urban Living Labs; Real Setting; Innovation.

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**A 58**  
**UE 001**

## **Urban Agriculture As A Community Resilience Strategy Against Urban Food Insecurity**

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### **Abstract**

The phenomenon of urbanization has become a topic in a changing environment. The changes can be seen through the increase of 55% world population, particularly in urban areas, from 751 million in 1950 to 4.2 billion in 2018. The increase is subjected to the natural population growth, local and international migration, and expansion of urban settlement. Among those factors, the projection of urban land expansion for the creation of the built environment is expected to the loss of 1.8 to 2.4% global agricultural land by 2030. Among all, urban agriculture has become one of an initiative in overcoming the impact of food insecurity due to urban land expansion that occurs on agricultural land. The effort is practiced by small scale urban dwellers depending on land availability. Previous studies have shown that such practices are suitable to be applied among the urban poor, mainly low-income households, a vulnerable community that experienced significant food stress. However, rather than potentially improve urban food insecurity through adequate, safe, and nutritious food supply, little is known on its potential for community resilience. Hence, the study aims to understand the relationship between community resilience and urban agriculture program conducted by the agencies, institutional, or individual. In this context, resistance has the role of adapting the urban food insecurity stresses among low-income households. This association is believed to be driven by social protection, which further recognized as one of the initiatives in sustainable development strategy. The objectives are (i) to identify the elements of food security and (ii) to explore the strategy for community

resilience from urban agriculture perspectives among the low-income household. This study employs a qualitative approach through a systematic literature review by three phases that encompasses identification, screening, and eligibility of secondary sources. A total of 176 articles are compiled for this study and systematically analyzed using thematic analysis. The review from a shortlisted article (n=15) reveals that the sustainable food system can be achieved through food availability, food accessibility, food utilization, and food stability. Accordingly, the association between urban agriculture and community resilience categorized into social, economic, and environmental strategies focusing on survival livelihood, social safety nets, and sustainable agricultural support. Hence, the issues of urban land expansion and its impact on urban food insecurity in urban agriculture perspectives are akin to the concept of community resilience associated with social protection.

**Keywords:** urban agriculture; community resilience; urban food insecurity; low-income household

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# **Workplace Environment**





**A 59**  
**WE 003**

**Analyzing Social Interaction in Coworking Space:  
Case Study on Common Ground Damansara  
Heights**

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**Abstract**

Trending of workers is no longer being constrained to work traditionally in the office. They are more likely to be flexible and mobile - "coworking spaces"; expanding globally since the year 2006. Malaysia started the first coworking space in 2010; until to-date around 70 coworking spaces are found. The rise of this coworking in Malaysia recent years stimulated publications of local news and articles such as "The Edge Malaysia", "New Strait Times", "Malaysia Reserve" and other researchers; becoming a hot topic in property and economic field. Coworking is defined as people work together in a shared space, share the same facilities; thus, creating social interaction to form a community. Many researchers described 'coworking' as spaces which people meet and gather, share common facilities; to create a spark between users where they probably happier, more productive, stay and work independently. Through literature publication in Asia, there is a lack of exposure study on the social interaction between users in coworking; most of the reviews are focusing on market value and revenue only. This paper aims to analyze user social interaction in coworking space in Common Ground Damansara Heights. To achieve the aim, the study identifies user perception and preferences on social interaction in coworking space. Quantitative and qualitative method is utilized through on-site distribution and questionnaires survey from users in Common Ground Damansara Heights. The questionnaires survey is categorized in terms of demographic information; user perception and preference on social interaction in coworking spaces. All the data collected will be documented through photographs, charts and tables. The data will be analyzed in a

descriptive method and Likert scale and mean process. Towards the end of this study, social interactions might be the primary motivation for the user to work in coworking spaces. This conclusion will inform a set of suggestion to designers and academics learning for future design and planning decisions that take into consideration to suggest an area for social interaction between the user in coworking spaces.

**Keywords:** social interaction; co working space; facilities management;

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## A 60 WE 001

# Gender Dichotomy of Board Members and Ownership Structure in Dividend Payout: A Review

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### Abstract

The objective of this paper is to provide the adequate support for research through rigorous reviews of the literature on board dichotomy relative to gender and dividend payout. Similar to other work settings, the corporate environment's quality of life is also dependent on multi-faceted factors that affect the staff, visitors, and other stakeholders. Across the levels of corporate management, the highest hierarchy is the board members. In Malaysia, although there are similarities in the accounting and regulatory environments with the United States and Great Britain, institutional differences were detected. As a developing country, Malaysia's corporate governance has been influenced by the British administrative system. The review of literature required repeated searching of major online databases using consistent keywords such as corporate environment, board composition, gender, dividend payout, and dividend policy. Fifty relevant journal articles were analyzed through thematic analyses and alignment of the five keywords. The findings from these journals were repeatedly perused for pertinent gaps that would allow for further investigations. Consequently, the analyses of the literature reviewed on corporate governance showed that women and ethnic minority board members could contribute unique benefits and resources; this is because they tend to have diverse backgrounds and human capital, which allowed them to address different environmental dependencies. A previous study concluded that women bring a host of different soft-skill resources to their jobs, in the form of leadership competencies. This study also revisited the questions of what determines

dividend policy. On the dividend payout and policy, the literature evidenced that the Malaysian financial markets for the buying and selling of long-term debt or equity-backed securities offered a viable setting to examine the determinants of dividend policy empirically. In addition, the main aspects of research concerning dividend payout were guided by signaling and agency theories. The comparative reviews of focused literature provided the reassurance the presence of female board members does not significantly influence dividend payout. Also, the dividend payout rate is based on the firm's performance. Essentially, the implications of this review is for the actual study, nonetheless, the impacts parallel that of the United Nations' Sustainable Development Goals number 8 (Decent work and economic growth) and Malaysia's Shared Prosperity Vision 2030.

**Keywords:** corporate environment; board composition; gender; dividend payout

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## A 61 WE 004

# The Psychological Comfort Elements of Malaysian Professional Construction Expatriates Abroad

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### Abstract

The statistics The number of Malaysian expatriates working abroad is growing from year to year. It was estimated in 2019, that approximately 150,000 Malaysians who were working in the US, Australia, Canada and UK were highly skilled. It shows that the number of Malaysian professionals prefers to work abroad rather than in their own country. Among the reasons for this phenomena is the psychological comfort of the individual to stay with the company because of better facilities, salaries and benefits. The success of the company solely depends on the individuals who work with the company. Psychological comfort relating to everything contributes to the well-being and convenience of the individual. Individual adjustment is a degree of psychological comfort that an expatriate experiences during assignment abroad. Different expectations while being abroad lead to uncomfortable feelings and difficulties in the new environment. Dissatisfaction with the company will lead to the intention to leave for a new employer. The psychological elements such as interaction, living environment, reward and social life contribute to the achievement of the expatriate. Content analysis was used to analyse the aspects influencing the psychological comfort to perform tasks of the expatriates. The purpose of the study is to identify the elements that contribute to the physiological comfort of the individual. Individuals are likely to leave an organisation when they experience job dissatisfaction, poor working conditions, lack of career opportunities and low remuneration. Hence, employees are the main factor contributing to the success of any organisation. The longer time the employees spend in the organisation, the more experienced they become. The study has found that differences

in life and social culture would result in cross-culture adjustment problems for expatriates. The loss of Malaysian professional expatriates will hinder the achievement of the world-class workforce in the year 2020. The lack of Malaysian professionals thus leads to companies employing foreign professionals to fill in job positions that should belong to Malaysian professionals.

**Keywords:** Psychological comfort; Expatriate; Construction, Professional

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## A 62 WE 002

# Understanding and Measuring the Determinants of Employees' Turnover Intention

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### Abstract

Employees' turnover intention has become a severe issue in developing countries, including Malaysia. Recent statistics identified that Malaysian workers looking for leaving their job after six months of working are relatively high. Besides, the manufacturing sector indicates high turnover intention rather than industries due to the workplace environment. The excessive workload, poor safety, and health management program, unpleasant situation with co-workers and supervisor support are among the challenges in retaining employees. Employees a crucial asset to the organization in which the success is entirely dependent on the quality and credibility of its workforce. The employee's intention to quit leads to a negative effect on employee productivity and organizational performance. As a result, the organization will suffer from the cost associated with replacing and training new employees. The present study investigates the main factor that influences turnover intention among employees, and to examine the relationship between employees' turnover intention and its predictors in the manufacturing sector. The data were collected using quantitative questionnaire research distributed among 199 employees in manufacturing sectors located in the North Region, Peninsular Malaysia. The data analysis was conducted using SPSS and PLS-SEM to evaluate the factors that influence turnover intention through the assessment of the measurement and structural model. The results show that relationships with co-worker factor influence the employee's turnover intention. Moreover, the findings confirm that the work environment factors, such as workload, job safety and security, and relationship with co-workers affect the turnover intention of



employees in the workplace. However, supervisor support has no significant association with the employee's turnover intention. These findings outline implications for management that require identification and evaluation of the factors of the sustainable development of employees. Therefore, an organization should develop new strategies to retain their employees as well as to improve the performance of organization and competitiveness.

**Keywords:** Turnover Intention; Work Environment; Manufacturing Sector

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