



Volume 249, Issue 1

2016

August 1-2, 2016
Melbourne, Australia

MMHS

CONFERENCE PROCEEDINGS

BOOK OF ABSTRACTS MMHS-2016

**International Conference on
“Medical, Medicine and Health Sciences”
(MMHS-2016), Melbourne, Australia**



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Book of Abstracts Proceeding

**International Conference on
“Medical, Medicine and Health Sciences”
(MMHS-2016)
Melbourne, Australia**

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Proceedings of the International Conference on

**“Medical, Medicine and Health Sciences
(BESSH-2016)”**

ISBN: 978-969-670-811-7

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**International Conference on
“Medical, Medicine and Health Sciences”
Melbourne, Australia
Venue: Melbourne Convention and Exhibition
Centre. Melbourne Victoria Australia**

ORGANIZING COMMITTEE

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CONFERENCE CHAIR MESSAGE

Dr. Malika Ait Nasser

International Conference on Business Economic, Social Science & Humanities” serves as platform that aims to help the scholarly community across nations to explore the critical role of multidisciplinary innovations for sustainability and growth of human societies. This conference provides opportunity to the academicians, practitioners, scientists, and scholars from across various disciplines to discuss avenues for interdisciplinary innovations and identify effective ways to address the challenges faced by our societies globally. The research ideas and studies that we received for this conference are very promising, unique, and impactful. I believe these studies have the potential to address key challenges in various sub-domains of social sciences and applied sciences.

I am really thankful to our honorable scientific and review committee for spending much of their time in reviewing the papers for this event. I am also thankful to all the participants for being here with us to create an environment of knowledge sharing and learning. We the scholars of this world belong to the elite educated class of this society and we owe a lot to return back to this society. Let’s break all the discriminating barriers and get free from all minor affiliations. Let’s contribute even a little or single step for betterment of society and welfare of humanity to bring prosperity, peace and harmony in this world. Stay blessed.

Thank you.

Dr. Malika Ait Nasser

Conference Chair

Email: chair2016@academicfora.com

MMHS-2016



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CONFERENCE PROGRAM

DAY 01 Monday (August 01, 2016)
Welcome Reception & Registration

9:00– 9:30 am

Opening Ceremony (09:30 – 10:00 am)

Venue: Room 1

09:30 – 9:40 m	Introduction of Participants
09:40– 9:50 am	Welcome Remarks – Ms. Ani Wahyu Conference Coordinator Academic Fora
09:50 – 10.00 am	Group Photo Session

Grand Networking Session and Tea Break (10:00– 10:30 am)



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DAY 01 Monday (August 01, 2016)

Session 1 (10:30 am – 12:00 pm)

Venue: Room 1

Session Chair: Mr. Leon Yap

Track A: Business, Economics, Social Sciences and Humanities

MLS-186-107	The Tragic in Tragedy: The Available but Ungraspable Freedom of the Historical Man	Dr. Bahee Hadaegh
MLS-186-107A	The Tragic in Tragedy: The Available but Ungraspable Freedom of the Historical Man	Mohsen Sohrabi
MLS-186-108	Determinants of Green Consumption of Generation Y in Chiang Mai, Thailand	Nisachon Leerattanakorn
MLS-186-119	The Role of Middle Class on Democratization	Thanee Chaiwat

Track C: Medical, Medicine and Health Sciences

MLM-186-104	Quantification of Gait Function and Postural Stability using a Novel in-shoe Pressure System in Physically Frail Persons	Emi Anzai
MLM-186-105	Does Technology Improve Athlete Engagement in Mental Training Techniques?	Billymo Rist

Lunch Break (12:00 - 1:00pm)

DAY 01 Monday (August 01, 2016)

Session 2 (01:00 pm – 02:30 pm)

Venue: Room 1

Session Chair: Mr. Leon Yap

Track B: Engineering & Technology, Computer, Basic and Applied Sciences

MLE-186-108	A Systematic Airborne Particle Monitoring in a GMP Grade C Hospital's Preparation Room	Huiyi Tan
MLE-186-109	Effects of Surgeon Movement on Particle Settlement in a Hospital's Operating Room	Keng Yinn Wong
MLE-186-111	Evaluation of Foot Deformity Based on the Plantar Pressure during Walking	Kanako Nakajima

Tea Break (02:30pm – 02:45pm)

Closing Ceremony



LIST OF CONFERENCE ATTENDEES

The following Scholars/ practitioners/educationist who don't have any paper presentation, however they will attending the conference as delegates & observers.

Sr.no	Official ID	Name	Affiliation Details
1	MLS-186-112A	Domnic Ngodo Moabi	Unicell Touch Hairpiece and Cosmetics LTD, South Africa
2	MLM-186-103A	Najlaa Sulaiman Rashed Alantali	Melbourne university, Australia

DAY 02 Tuesday (August 02, 2016)

City Tour and Shopping Day

All respective guests are free to conduct their own sightseeing and tour. The second day of the event is reserved for this memorable purpose.



TRACK A: MEDICAL MEDICINE AND HEALTH SCIENCES



Quantification of Gait Function and Postural Stability Using a Novel In-Shoe Pressure System in Physically Frail Persons

Emi Anzai¹, Kazuhiko Yamashita², Yuji Ohta³

Ochanomizu University, Japan

Abstract

A valid assessment method of physical function is required to standardize and quantify the level of frailty and thus to suggest a more suitable intervention for frail person. The purpose of this study is to elucidate the usability of our device and to examine gait function and postural stability between the frail people and non-frail people using a novel in-shoe plantar pressure measurement system. Six hundred-twenty four people in community dwelling (219 men, 405 women) aged 41–98 years (mean 71.5, S.D. 7.94) participated in this study. Gait function and postural control were assessed using the in-shoe plantar pressure measurement system and results were compared between the frail and non-frail group which were classified based on the level of lower limb muscle strength such as toe-gap force and knee adductor muscle strength. The result of this study suggests that in-shoe plantar pressure measurement system could be used to determine gait function and postural stability for 624 people in community dwelling, including frail people. The frail group showed significantly greater path length, area and ML length of COP during standing than control group. In gait function, the frail group have smaller single support phase, greater stance phase time, smaller the heel peak pressure and toe peak pressure than controls. Our findings indicate that frail group has a decline in gait function and postural stability. We believe that the methods used in this study and our findings will be useful to better understand the level of frailty and assist experts to provide more suitable intervention for frail person.

Keywords: Frailty, Gait Function, Postural Control, Lower-Limb Muscle Strength, In-Shoe Plantar Pressure Measurement Device

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Does Technology Improve Athlete Engagement in Mental Training Techniques?

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¹Player Development Coordinator St Kilda Football Club Linen House
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²Melbourne School of Health Sciences, University of Melbourne Australia

Abstract

Elite athletes are aware of the potential benefits of mental training techniques to deal with the stressors of training and competition. However, this particular cohort struggle with allocating meaningful time to work on mental training programs within the overall training program. The aim of this study was to test the hypothesis that Smartphone applications will improve athlete engagement with mental training programs. Forty-six male adults (mean age 24 years) who play for one professional Australian Rules football team were recruited to participate in this study. Using a between groups repeated measures design, players were randomized into three groups to undertake participation in one of three applications over a four-week period: one group completed a mindfulness application (Headspace), a second group completed a brain training application (Cognifit), and a third were control and used a neutral application (Soothing Sounds). Players were assessed pre and post the four-week program on engagement; and measures including sleep (duration and quality), resilience, flow state, determination, and overall wellbeing. Results showed no differences in groups, or change in the dependent variables. However, player engagement was markedly reduced in all groups with compliance falling, compared to initial participation levels, by 43%, 38% and 42% for the mindfulness, brain training and neutral applications respectively. This study demonstrates that Smartphone applications do not improve compliance with mental training programs, or significantly improve outcomes, in this professional athlete environment. Practical applications would include prompting and encouraging athletes to engage in undertaking psychological mental training, as technology alone is not sufficient to increase uptake.

Keywords: Multimedia Recourses, Elite athletes, Compliance, Mental training, Smartphone applications, Technology

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**TRACK B: BUSINESS, ECONOMICS, SOCIAL
SCIENCE & HUMANITIES**



The Tragic in Tragedy: The Available but Ungraspable Freedom of the Historical Man

Dr. Bahee Hadaegh^{1*}, Mohsen Sohrabi²

^{1,2}Faculty of Foreign Languages & Literature, School of Literature and
Humanity Science, Shiraz University, Iran

Abstract

The paper aims to apply Heidegger's notion of in/authenticity to the character Orestes in Aeschylus' *The Eumenides*. The examination of authenticity is the departure point after which the question of freedom in this tragedy can be addressed mainly with Heidegger's philosophical book, *Being and Time* in view. It then discusses a possible interpretation of the Greek god Apollo which frees and yet entangles Orestes in his course of decisions, which is also a harbinger of a new historical era in which the mythos for the historical Dasein brings it to the destiny of people. Heidegger's understanding of tragedy brings the fate of historical man to the destiny of its people; therefore, in this reading of Aeschylus' *The Eumenides* the individual _as in early Heidegger_ transforms into a historical gestalt which is meaningful only with a look into the possibilities of future.

Keywords: Ungraspable Freedom, Historical Man, Tragedy

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Determinants of Green Consumption of Generation Y in Chiang Mai, Thailand

Nisachon Leerattanakorn*

Faculty of Economics, Maejo University, NongHarn, San Sai, Chiang Mai, Thailand

Abstract

This study on Means to Add Values on Green Products of Generation Y in Chiang Mai, Thailand aims to explore green consumption behavior, identify market segment and propose marketing strategies. Chiang Mai is the second biggest city of Thailand and the governor strategizes to be green city, while aging society is a major trend of Thailand, so the attitudes of generation Y is important to be accepted in the near future. This research surveys 1,000 samples in Chiang Mai. Results show that most of the Gen Y concerns about green consumption, while the concerns are concentrated in the medium level of green consumption. Random effects model shows that number of family members, education level, family income and attitude on environment problems significantly affect frequency of green uses. Gen Y suggests that Product and Promotion are very important, while Price and Place are not much. Also they can afford more for green products. This result is because Gen Y consumes to build their own identity, so they prefer self-assured products to competitive price.

Keywords: Green Consumption, Green Consumer, Green Marketing, Sign Consumption

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The Role of Middle Class on Democratization

Thanee Chaiwat¹, Wantiwa Mannaitham^{2*}

Chulalongkorn University, Thailand

Abstract

The purpose of this research is to theoretically examine the impact of middle class income on democratization by using the mathematical model. This paper extends Acemoglu's two-class model to three-class model; the rich, the middle class and the poor. The middle class income as a median voter affects democratization through the costs of (1) revolution, (2) repression, and (3) coup d'etat. Results show that if the middle class is richer under nondemocratic regime, it will lead to less probability of revolution, high probability of repression and less probability of coup. So it makes less probability to democratize. But, conversely, if the middle class is richer under democratic regime, it goes opposite ways and makes more consolidated democracy. This is the reason why some countries get difficulties to achieve better quality democracy even if their income is higher.

Keywords: Democratization, Democracy, Middle Class Income

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**TRACK C: ENGINEERING & TECHNOLOGY,
COMPUTER, BASIC & APPLIED SCIENCES**



A Systematic Airborne Particle Monitoring in a GMP Grade C Hospital's Preparation Room

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Nazri Kamsah⁴

¹Faculty of Biosciences and Medical Engineering, Universiti Teknologi Malaysia

^{2,3,4}Faculty of Mechanical Engineering, Universiti Teknologi Malaysia

Abstract

A hospital's preparation room is a healthcare facilities customized for the patients, prior to the surgical procedures. In the room, the patients are required to change to surgical gown and insert an intravenous line vein injection. A very conducive environment is necessary to minimize the contamination of airborne particles onto the patients. A highly contaminated environment could potentially increase the tendency of a patient to be infected. The goal of this study is to demonstrate a systematic procedure in monitoring the airborne particles concentration in a GMP Grade C preparation room. The preparation room is equipped with High-Efficiency Particulate Air (HEPA) filters, with a vertically downward airflow system. All the measurements were being carried out at a rest condition which complies with the ISO 14644-1 standard. A Lighthouse 3100+ laser particle counter was being used to measure the different sizes of Particulate Matters (PMs), specifically, PM 0.3, PM 0.5, PM 1.0, PM 3.0, PM 5.0, and PM 10.0. Those recorded values were 80481 particles/m³, 33938 particles/m³, 21377 particles/m³, 2507 particles/m³, 1195 particles/m³, 883 particles/m³, respectively. The data has shown that the average PMs Concentration fell below the threshold as recommended in a GMP Grade C Guideline.

Keywords: Hospital, Preparation Room, gmp Grade C, Particulate Matters, Field Measurement.

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Effects of Surgeon Movement on Particle Settlement in a Hospital's Operating Room

Keng Yinn Wong¹, Haslinda Mohamed Kamar^{2*}, Nazri Kamsah³, Fazila Mohd. Zawawi⁴

^{1, 2, 3, 4}Faculty of Mechanical Engineering, Universiti Teknologi Malaysia

Abstract

The aim of this study is to investigate the effects of the surgeon's moving speed on the particles settlement. It was conducted by employing a computational fluid dynamics (CFD) method. The commercial CFD code, ANSYS Fluent R-14 was used to perform the simulations. A realizable $k-\epsilon$ model scheme based on the Reynolds-Averaged Navier-Stokes (RANS) equations was implemented to solve the velocity, temperature, and pressure fields. Whereas, a Lagrangian-based approach was applied to predict the particle transport in the operating room. A User-Defined Function (UDF) that defines the dynamic meshes is employed to simulate the lateral movement of the surgeon. The surgeon was assumed to be releasing 600 particles/min (1.31×10^{-12} kg/s). The buoyancy effect, gravitational force (9.81 kg m s^{-2}), and enhanced wall function were enabled in the study. The findings confirmed that there is a significant difference in airflow field and particles transport under three constant moving speeds, namely, 0.5 m/s, 1.0 m/s and 1.5 m/s. The results had shown that the 1.5 m/s moving speed created a high turbulent flow around the surgeon, which subsequently increased the particle settlement by 8 % when the surgeon passed through the supply air diffuser.

Keywords: Hospital, Operating Room, Surgical Site Infection, Airborne Particles, CDF Simulation.

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Evaluation of Foot Deformity Based on the Plantar Pressure during Walking

Kanako Nakajima^{1*}, Emi Anzai, Yuji Ohta²

¹National Institute of Advanced Industrial Science and Technology, Japan
²Ochanomizu University, Japan

Abstract

Hip fracture due to falls among elderly adults is a serious social problem. It is reported that foot problems are a risk factor for falls. Accordingly, foot deformities should be considered in order to prevent falls among elderly adults. The aim of this study was to clarify the relationship between foot deformity and gait function by using a plantar pressure measurement system. Six volunteers (3 young adults with no foot deformity: mean age 24.3 ± 3.2 years; 3 elderly adults with foot deformity: mean age 70 ± 3.5 years) participated in a 10-m walking experiment. Plantar pressure distributions during walking were measured by using an F-scan system (Nitta Corporation, Japan), and the peak pressure values in 7 areas were recorded. In the young adults, a typical wave pattern of plantar pressure values during walking was observed. An elderly adult with foot deformities (mild hallux valgus and bunionette) tended to have reduced plantar pressure values. This tendency can be explained by the depression of the forefoot arch and deformity of foot structures. The results of this experiment suggest a relationship between foot conditions and gait features. Individuals' foot conditions are closely related to activities of daily living and gait because of the plantar area in contact with the ground during standing and walking. Evaluation methods for plantar pressure during walking may enable quantitative assessment of foot function in elderly adults.

Keywords: Foot Deformity, Plantar Pressure, Gait Analysis, Elderly

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