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# BOOK OF ABSTRACTS

# CPIIS-18

**International Conference on Performance Indicators  
in Business and Social Science Research  
August 04-05 / Amsterdam, Netherlands**

Organizaed by



**ACADEMIC RESEARCH AND SOLUTIONS  
SOCIEDAD LIMITADA**

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# **Book of Abstracts of the International Conference on Performance Indicators in Business and Social Science Research**

CPIS-18

Edited by

Prof. Dr. Perez M.

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Mr. V.J. Pasola	Contact Person & Organizer
Mr. Juan García	Program Coordinator
Dr. T.I.K	Conference Secretary

## **Welcome to Academic Research and Solutions Sociedad Limitada (ARS)**

ARS provides an ideal academic platform for researchers to present the latest research findings and describe emerging technologies, and directions in Social Sciences, Business Management, Engineering and Natural Science issues. The conference seeks to contribute to presenting novel research results in all aspects of Social Sciences and Engineering. The conference aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results about all aspects of Engineering, Social and Applied Sciences. It also provides the premier interdisciplinary forum for scientists, engineers, and practitioners to present their latest research results, ideas, developments, and applications in all related areas. The conference will bring together leading academic scientists, researchers and scholars in the domain of interest from around the world. Our oncoming events of the successful conference series focusing on Engineering and Social Sciences. Hence, the scientific program focuses on current advances in the research, production and use with particular focus on their role in maintaining academic level in Engineering, Social & Applied Sciences and elevating the science level. The conference's goals are to provide a scientific forum for all international prestige scholars around the world and enable the interactive exchange of state-of-the-art knowledge. The conference will focus on evidence-based benefits proven in clinical trials and scientific experiments.

Best Regards,  
Chairman of Conference  
Prof. Dr. T.I.K.





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**Venue: Mercure Hotel Amsterdam City, Netherlands**

# PROGRAM SCHEDULE



# Conference Schedule

**DAY 01 Saturday (August 04, 2018)**

**Venue: Mercure Hotel Amsterdam City, Netherlands**

09:00 am – 09:30 am	Registration & Kit Distribution
09:30 am – 09:40 am	Introduction of Participants
09:40 am – 09:50 am	Inauguration and Opening Address
09:50 am – 10:00 am	Grand Networking Session
10:00 am - 10:30 am	Tea/Coffee Break

**Session 001 (10:30 am – 01:00 pm)**

**Track: Business Management & Social Sciences**

<b>Point of Discussion</b>	<b>Presenter</b>
Consumers' Counterfactual Emotions of Undesirable Purchases when Meeting the Minimum Purchase Requirement	Prof. Hsuan-Hsuan Ku
Linking Pension Investment and Liability via Human Capital Investment	San-Lin Chung
Identification of Prognostic Markers of Developmental Delay in 4-year-olds	Liubov Tkacheva & Assoc. Prof. Andrey Nasledov
Discussion-Based Concept Cartoon System Applied to Mathematics Learning	Assoc. Prof. Huang, Tzu-Hua
Customer Incivility and Psychological Well-being: A Moderated Mediation Model	Assoc. Prof. Chien-Chih Kuo
Does CSR Disclosure an Indicator for Financial Reporting Quality? Evidence from Emerging Market	Dr. Zakaria Aribi
Government IT Related Hi Tech Company's Subsidies Role on Industries in China	Faizo Kasule

**Track B: Engineering Technology & Applied Sciences**

Flame Transition Velocities at Various Intercylinder Spacing for Side-by-Side Dual Blowing Cylindrical Burners	Hsing-Sheng Chai (Shin-shen TSA)
Fuzzy Optimization for Logistic Problems: Fuzzy Transportation and Fuzzy Location Analyses	Assist. Prof. Dr. Murat GÜLBAY

**Lunch Break (01:00 pm - 02:00 pm)**

**Ending Note**

## List of Conference Attendees

The following scholars/ practitioners/educationists who don't have any paper presentation, however they will attend the conference as delegates & observers.

Sr. No	Official ID	Name	Affiliation Details
1	08-CPIS-107C	Assoc. Prof. Andrey Nasledov	Department of Pedagogy and Pedagogical Psychology, Sankt- Petersburg State University, Russia
2	08-IMCS-101A	Chiao-Fen Tsai	Taiwan



## **2nd Day (August 05, 2018)**

**Whether visiting from overseas or interstate, delegates and guests are free to discover Netherlands and its surrounds by their own.**



**TRACK: BUSINESS MANAGEMENT & SOCIAL SCIENCES**



# Government IT Related Hi-Tech Company's Incentives and subsidies Role on Industries in Hebei Province, China

Faizo Kasule<sup>1\*</sup>, Li Zibiao<sup>2</sup>, Keyuan Sun<sup>3</sup>

**Abstract** There are several economic implications on government Incentives to industries. Using the government annual survey data on Chinese listed corporation in Hebei province, the aim of this paper is to reveal the impact created by the government Incentives on the IT related Hi tech companies by investigating the incentives related parameters, using regression method, results from a survey of 85 IT related industries in Hebei province showed that there were significant positive impact of company's incentives role, the incentives given by government increase output in industries. This study examined the role that the government incentives played in regard to high-tech related industries Using multiple regression analysis method, the results indicated that related Hi-tech company's incentives created a significant impact in increasing the gross value of industrial output, created an impact in both product sales income and the commodity sales revenue. However, the results indicated that not all the government IT related Hi-tech company's incentives that led to improved total income between the periods of study. Moreover, there would be anticipated increase employee rate if these incentives were constantly provided to Hi-tech companies consistently but in totality there was no clear increase in personnel over that period. This study therefore provided room for discussion and further studies that would help in coming up with other concrete evidence in subsequent years.

**Keywords:** Government's Incentives and Subsidies; Innovation Performance; IT Related Hi-Tech Companies

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# Consumers' Counterfactual Emotions of Undesirable Purchases when Meeting the Minimum Purchase Requirement

Prof. Hsuan-Hsuan Ku\*

**Abstract** A minimum purchase requirement (MinPR), where a customer is required to purchase a set minimal amount of products as a prerequisite for enjoying a discount, is one common type of sales promotion. When faced with a MinPR, consumers may try to find enough items to exceed a given MinPR due to the economic advantages it brings (Yoon & Vargas, 2011). This deal-seeking behavior may, however, be debatable when consumers may be unable to find their first-choice product options and have to settle for those that they did not originally prefer. This research examines how discount level will shape counterfactual thinking consumers engaged in when making an undesirable purchase, which in turn have an impact on their affect. Consumers who make desirable purchases to meet the MinPR may imagine that the alternative could have gone worse (i.e., downward CFT) and experience satisfaction. By contrast, those who change the status quo and pay for an undesirable product in order to meet the MinPR are likely to engage in upward CFT (i.e., how things could have gone better) and feel frustrated. Studies of decision justifiability, however, have suggested that feelings of regret over a decision to switch are mitigated by reflection that it was an appropriate one in the particular circumstances (Inman & Zeelenberg, 2002). The significant gains derived from success in meeting the restriction may be regarded as justifiable reasons which desensitize people to possible disappointment. Therefore, consumers who make undesirable purchases to meet the MinPR will engage in less upward CFT and feel better in the case of high rather than low discount level. The results of our study show that consumer reactions to an undesirable purchase depend on discount level. Specifically, high discount level mitigated participants' counterfactual emotions of undesirable purchases.

**Keywords:** Minimum Purchase Requirement, Discount Level, Counterfactual Thinking, Consumer Affect

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# Linking Pension Investment and Liability via Human Capital Investment

Fen-Ling Chen<sup>1</sup>, San-Lin Chung<sup>2\*</sup>

**Abstract** This paper proposes a channel for the creation of wage-indexed assets and earning-linked assets, which are human capital assets urged by many researchers for decades. Via this channel, student loan repayment amounts are determined by the average wage index or the borrower's extra earnings coming from human capital investment in college education. These two types of loans are attractive to students because they can use incomes from their human capital to pay off their loans. On the other hand, pension funds can use wageindexed assets, created from the new type of student loans, to hedge their pension liabilities. We also advocate a security payoff function, equal installment, for indexed assets to provide cash flows of equal value denominated in the "index" currency. Using the equal installment wage-indexed assets, investors can mimic cash flows proportional to average wages of the labor market. Finally, the valuation of the proposed student loans, policy suggestions, and extensions are also discussed in the paper.

**Keywords:** Human Capital, Pension Liability, Student Loan, Wage-indexed Asset, Income Sharing, Average Wage Index

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# Identification of Prognostic Markers of Developmental Delay in 4-year-olds

Nasledov A.D.<sup>1</sup>, Tkacheva L.O.<sup>2\*</sup>, Miroshnikov S.A.<sup>3</sup>

**Abstract** It is known that the diagnosis of developmental delay (DD) is temporary, with a high potential for rehabilitation and adaptation when timely diagnosis. Hence the importance of the time of intervention - the sooner DD identified, the more effective rehabilitation is. The aim of the study is to identify prognostic markers (PM) of DD in 4 year-olds. PM should be based on indicators that are easily available for diagnosis and should constitute ultimately a prediction model (DD, Norm) with high sensitivity and specificity. Instruments: a system of tests (236 items) proposed by experts and used in their diagnostic work with children: from motor skills to cognitive abilities and social development. The sample: 575 children of group Norm and 53 children of DD (age 1461 - 1827 days). Using factor and discriminant analyses and modeling of structural equations, predictors of Diagnosis (Norm-DD) were obtained, in descending order of their contributions: "Logical reasoning", "Motor skills", "General awareness". The selected factors differ significantly from the structures of traditional tests of abilities, because the selection excluded variables that are related poorly to significant differences in normal and "delayed" development, and due to the fact that a wider range of test tasks and formalized observations were used than in traditional standardized tests and studies. The high accuracy of the prediction indicates presence of a dramatic gap in the level of development of groups (Norm and DD). This may be due to the late diagnosis of children's development problems in Russia. A scale was constructed to assess accurately the probability of DD based on the results of fulfillment of 20 tasks, which makes it suitable for the rapid identification of a "risk group" among 4 year-old children.

**Funding:** This work was supported by Russian Foundation for fundamental researches (grant № 17-06-00989/17-ОГОН)

**Keywords:** Prognostic Markers, Developmental Delay, Norm, 4-Year-Old Children, Screening

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# Discussion-Based Concept Cartoon System Applied to Mathematics Learning

Assoc. Prof. Huang, Tzu-Hua<sup>1\*</sup>, Li, Tzu-Ying<sup>2</sup>

**Abstract** This study combines concept cartoons and learning through discussion into a learning system. We hope to understand the influences of mathematics achievement, mathematics attitude, mathematics interest, mathematics anxiety by different concept cartoons teaching methods. The results show that there are significant differences between these three groups in the mathematics achievement, and the discussion-based concept cartoons group performs well than other two groups; Mathematics achievement and mathematics attitude have a significant positive correlation. Mathematics achievement and mathematics interest have a significant positive correlation; Mathematics achievement and mathematics anxiety have a negative correlation. From this, the discussion-based concept cartoons teaching method can improve the student's mathematics achievement.

**Keywords:** Concept Cartoon, Discussion-based, Mathematics Achievement

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# Customer Incivility and Psychological Well-Being: A Moderated Mediation Model

Assoc. Prof. Chien-Chih Kuo\*

**Abstract** The front-line service representatives in the service industry are frequently required to endure the uncivilized behavior from customers, and thus experience frustration or distress which damages their mental well-being. This study posits that service employees interact with the uncivilized customers and have to self-control and self-regulate the emotional expressions and behavioral action in order to conform the service norms of the organization. This will deplete employees' psychological resources and harm to their mental well-being. Indeed, this research postulates that the depletion of psychological resources plays a mediating role in the relationship between customer incivility and psychological well-being. Furthermore, this study also argues that work motives can be used to effectively buffer the depletion of psychological resources when employees experience customer incivility. Therefore, a moderated mediation model is proposed to illustrate the impact of customer incivility on the mental well-being through the resource depletion in the different levels of work motives. Data from 175 front-line employees in the public transportation industry in Taiwan. The results of this study reveal that customer incivility reduced the employee's psychological well-being through the depletion of personal psychological resources (i.e., self-efficacy, organizational-based self-esteem, and optimism). Furthermore, work motives (i.e., approach or avoidance work motives) can buffer the depletion of psychological resources. The results show that employees with high approach or high avoidance work motives can effectively buffer the negative effect of customer incivility on psychological well-being. This research outlines the critical role of work motives which affects the relationship of customer incivility, psychological resources, as well as employee well-being. Finally, we further discussed and illustrated the implications in management, research suggestions in the future, and the limitations in this study according to the results.

**Keywords:** Customer Incivility, Psychological Well-Being, Psychological Resource, Work Motives

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# Does CSR Disclosure an Indicator for Financial Reporting Quality? Evidence from Emerging Market

Dr. Zakaria Aribi\*

**Abstract** This study examines the impact of the quality Corporate Social Responsibility disclosure (QCSR) on both accruals-based earnings management (AEM) and real activity earnings management (REM). Using a sample of 1908 firm-year observations of available data from Indian listed companies, we found that High-QCSR firm tend to reduce or avoid both AEM and REM compared to low-QCSR firms. Additional analysis of firms with relatively strong earning management incentives confirm the significant impact of QCSR on AEM and REM. Our findings are also robust to the alternative measure of earnings management.

**Keywords:** CSR Disclosure, Accrual Earning Management, Real Earning Management

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**TRACK: ENGINEERING TECHNOLOGY AND APPLIED SCIENCES**



# Flame Transition Velocities at Various Intercylinder Spacing for Side-by-Side Dual Blowing Cylindrical Burners

Assistant Prof. Hsing-Sheng Chai (Shin-shen TSA)<sup>1\*</sup>, Vong-Ren Chen<sup>2</sup>, Chiun-Hsun Chen<sup>3</sup>

**Abstract** This study investigates the flame transition velocities at various intercylinder separation distances for side-by-side dual blowing cylindrical burners. The flame transition velocity is defined as the airflow velocity at which the envelope flames over the two burners transform into two separate wake flames. The transition velocity is measured as a function of intercylinder spacing ( $L$ ) at a fuel ejection rate of 1.23 cm/s. The transition velocity increases as  $L$  decreases through the range of  $1.2D \leq L \leq 2.5D$  ( $D$  is diameter of cylindrical burner). When  $L > 2.5D$ , the transition velocity remains constant because the two flames do not interact with each other.

**Keywords:** Counterflow Flame, Porous Cylindrical Burner, Flame Transition Velocity

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# Fuzzy Optimization for Logistic Problems: Fuzzy Transportation and Fuzzy Location Analyses

Assist. Prof. Dr. Murat GÜLBAY\*

**Abstract** Logistics is the process of planning, implementing, and controlling procedures for the efficient and effective transportation and storage of goods, including services and related information, from the point of origin to the point of consumption. The main aim of the logistics is to successfully meet customer and/or production requirements in terms of inbound, outbound, internal, and external movements. In the classical optimization models which are used to analyze logistic problems, the data are assumed to be certain, well-known, and constant while charting and mapping out a course of action. Unfortunately, these assumptions are not true for the cases of the most of the real and practical applications, i.e., material flow between origin and destination may vary within time. To perform better analysis, vagueness and uncertainty of the data under consideration should be modeled by means of fuzzy logic. In order to reduce information costs and unrealistic modeling as well, the use of fuzzy linear programs can be recommended. In this presentation, fuzzy optimization models are reviewed and their applicability to logistic problems are discussed. A methodology is presented to handle fuzzy transportation and transshipment problems, and fuzzy location analyses. Fuzzy models for fuzzy optimization of logistic problems are investigated and a hybrid model is proposed to offer the advantage that the decision maker can model his problem in accordance to his current state of information. Solution process for getting a compromise solution is explained. Finally, exemplary problems are presented in order to illustrate applications of the fuzzy optimization to different logistic problems. Fuzzy models are solved by LINGO which is a comprehensive tool designed to build and solve linear, nonlinear, and integer optimization models quickly, easily, and efficiently. Lastly, interpretation of the results are explained for practical issues.

**Keywords:** Fuzzy Optimization, Fuzzy Transportation Problems, Fuzzy Location Problems, Fuzzy Logistics

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