

# PROCEEDINGS

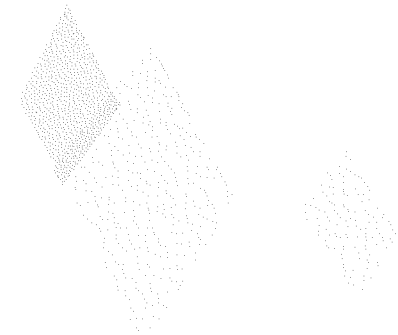
# I-SEEC 2017

The 8<sup>th</sup> International Science, Social Sciences,  
Engineering and Energy Conference

ISBN: 978-974-316-873-4

March 15<sup>th</sup> – 17<sup>th</sup>, 2017

A-ONE The Royal Cruise Hotel, Pattaya Beach, Chonburi, Thailand



Published by

Phranakhon Rajabhat University Bangkok Bangkok, Thailand 10220  
<http://iseec2017.pnru.ac.th/contact.php>

Cover Photo Credit : Anupongs Assadamongkol

# With many thanks to our Sponsors and Partners

1. Phranakhon Rajabhat University
2. The National Research Council of Thailand (NRCT)
3. Suan Sunandha Rajabhat University
4. Nakhon Phathom Rajabhat University
5. Udon Thani Rajabhat University
6. Pibulsongkram Rajabhat University
7. Ramkhamhaeng University
8. Rajamangala University of Technology Isan
9. King Mongkut's Institute of Technology Ladkrabang
10. Kasem Bundit University
11. Gunma University
12. Ton Duc Thang University

Organized by:



Supported by:



# STEERING COMMITTEES

## Chairman of I-SEEC 2016

Asst.Prof. Narongsak Jukrkorn, Thailand

Institute of Research and Development, Phranakhon Rajabhat University

## Steering Committee

<b>Prof. Dr. Preecha Yupapin</b>	(Vietnam)
<b>Prof. Dr. Yusaku Fujii</b>	(Japan)
<b>Prof. Dr. Oh Choo Hiap</b>	(Singapore)
<b>Prof. Dr. Jalil Ali</b>	(Malaysia)
<b>Dr. Viboon Pensuk</b>	(Thailand)
<b>Asst. Prof. Dr. Ravee Phromloungsri</b>	(Thailand)
<b>Asst. Prof. Dr. Jakrapong Kaewkhao</b>	(Thailand)
<b>Assoc. Prof. Dr. Somsak Mitatha</b>	(Thailand)
<b>Dr. Nithiroth Pornsuwancharoen</b>	(Thailand)
<b>Dr. Sappasit Thongmee</b>	(Thailand)
<b>Asst. Prof. Dr. Sawatsakorn Chaiyasoonthorn</b>	(Thailand)
<b>Asst. Prof. Dr. Suebtarkul Suchat</b>	(Thailand)
<b>Asst. Prof. Dr. Narong Sangwanate</b>	(Thailand)
<b>Asst. Prof. Dr. Nisakorn Sangwanate</b>	(Thailand)
<b>Mr. Suphanchai Punthawanunt</b>	(Thailand)

## Senior Guest Editor for Proceeding Publication

<b>Prof. Dr. Preecha Yupapin</b>	Ton Duc Thang University (Vietnam)
<b>Prof. Dr. Yusaku Fujii</b>	Gunma University (Japan)
<b>Prof. Dr. Oh Choo Hiap</b>	National University of Singapore (Singapore)
<b>Prof. Dr. Jalil Ali</b>	Universiti Teknologi Malaysia (Malaysia)
<b>Dr. Viboon Pensuk</b>	Udon Thani Rajabhat University (Thailand)
<b>Asst. Prof. Dr. Ravee Phromloungsri</b>	Udon Thani Rajabhat University (Thailand)
<b>Asst. Prof. Dr. Jakrapong Kaewkhao</b>	Nakhon Pathom Rajabhat University (Thailand)
<b>Assoc. Prof. Dr. Somsak Mitatha</b>	King Mongkut's University of Technology Ladkrabang (Thailand)
<b>Dr. Nithiroth Pornsuwancharoen</b>	Rajamangala University of Technology Isan (Thailand)
<b>Dr. Sappasit Thongmee</b>	Ramkhamhaeng University (Thailand)
<b>Asst. Prof. Dr. Sawatsakorn Chaiyasoonthorn</b>	Ramkhamhaeng University (Thailand)
<b>Asst. Prof. Dr. Suebtarkul Suchat</b>	Phranakhon Rajabhat University (Thailand)
<b>Dr. Chat Teeka</b>	Suan Dusit University (Thailand)
<b>Mr. Suphanchai Punthawanunt</b>	Kasem Bundit University (Thailand)
<b>Assoc. Prof. Dr. Tossawat Seetawan</b>	Sakon Nakhon Rajabhat University (Thailand)
<b>Asst. Prof. Dr. Narong Sangwanate</b>	Suan Sunandha Rajabhat University (Thailand)
<b>Asst. Prof. Dr. Nisakorn Sangwanate</b>	Suan Sunandha Rajabhat University (Thailand)
<b>Prof. Dr. Niwat Sanoamuang</b>	Khon Kaen University (Thailand)
<b>Assoc. Prof. Dr. Vasun Petcharat</b>	Prince of Songkla University (Thailand)

## Advisory Committee

<b>Assoc. Prof. Dr. Pong Horadal</b>	President of Phranakhon Rajabhat University
<b>Asst. Prof. Dr. Paiboon Viriyavathana</b>	Vice-Rector of Phranakhon Rajabhat University
<b>Dr. Sakorn Soisungwan</b>	President of Pibulsongkram Rajabhat University
<b>Asst. Prof. Dr. Sirisupha Emyuak</b>	Director of Research and Development Institute, Pibulsongkram Rajabhat University
<b>Asst. Prof. Narongsak Jukrkorn</b>	Institute of Research and Development, Phranakhon Rajabhat University

## International Committees

<b>Dr. Iraj Sadegh Amiri Ahmad</b>	Malaysia
<b>Dr. Toto Saktioto</b>	Indonesia
<b>Assist. Prof. Dr. Koichi Maru</b>	Japan
<b>Prof. Dr. Yusaku Fujii</b>	Japan
<b>Prof. Dr. Pichet Limsuwan</b>	Thailand
<b>Prof. Dr. Preecha Yupapin</b>	Vietnam
<b>Asst. Prof. Dr. Paiboon Viriyavathana</b>	Thailand
<b>Dr. Koichi Kaku</b>	Japan
<b>Dr. HongJoo Kim</b>	South Korea
<b>Prof. Dr. Jalil Ali</b>	Malaysia
<b>Prof. Dr. Oh Choo Hiap</b>	Singapore
<b>Prof. Dr. Asghar Asgari</b>	Iran
<b>Prof. Dr. Mitra Djamal</b>	Indonesia
<b>Prof. Dr. Kenneth T V Grattan</b>	UK
<b>Prof. Dr. Azizur B M Rahman</b>	UK
<b>Prof. Dr. Sun Tong</b>	UK
<b>Dr. Cathy Cai</b>	USA
<b>Prof. Dr. Booncharoen Sirinaovakul</b>	Thailand
<b>Dr. Kashif Tufail</b>	Malaysia
<b>Dr. Syed Zuhaib Haider</b>	Malaysia
<b>Dr. Mohamad Najmee Bilal</b>	Malaysia
<b>Dr. Ahmad Fakhrurazi</b>	Malaysia
<b>Prof. Dr. D.N. Wang</b>	China

## LIST OF EDITORIAL BOARD

<b>Prof. Dr. Yusaku Fujii</b>	Japan
<b>Prof. Dr. Preecha Yupapin</b>	Vietnam
<b>Prof. Dr. Jalil Ali</b>	Malaysia
<b>Prof. Dr. Oh Choo Hiap</b>	Singapore
<b>Prof. Dr. Asghar Asgari</b>	Iran
<b>Prof. Dr. Mitra Djamal</b>	Indonesia
<b>Prof. Dr. Kenneth T V Grattan</b>	UK
<b>Prof. Dr. Azizur B M Rahman</b>	UK
<b>Prof. Dr. Sun Tong</b>	UK
<b>Prof. Dr. D.N. Wang</b>	China
<b>Assist. Prof. Dr. Koichi Maru</b>	Japan
<b>Dr. Koichi Kaku</b>	Japan
<b>Dr. HongJoo Kim</b>	South Korea
<b>Dr. Cathy Cai</b>	USA
<b>Dr. Kashif Tufail</b>	Malaysia
<b>Dr. Syed Zuhaib Haider</b>	Malaysia
<b>Dr. Mohamad Najmee Bilal</b>	Malaysia
<b>Dr. Ahmad Fakhurrazi</b>	Malaysia
<b>Dr. Iraj Sadegh Amiri Ahmad</b>	Malaysia
<b>Dr. Toto Saktioto</b>	Indonesia
<b>Prof. Dr.Pichet Limsuwan</b>	Thailand
<b>Prof. Dr.Booncharoen Sirinaovakul</b>	Thailand
<b>Asst. Prof. Dr.Paiboon Viriyavathana</b>	Thailand
<b>Asst. Prof. Dr.Suebtarkul Suchat</b>	Thailand
<b>Asst. Prof. Dr.Oraphan Anurukvorakun</b>	Thailand
<b>Asst. Prof. Dr.Natt Makul</b>	Thailand
<b>Asst. Prof. Dr.Ongkarn Vanijajiva</b>	Thailand
<b>Asst. Prof. Pattra Suebsiri</b>	Thailand
<b>Asst. Prof. Dr.Nitta Roonkaseam</b>	Thailand
<b>Asst. Prof. Dr.Jakkapan Kittinorarat</b>	Thailand
<b>Asst. Prof. Dr.Narongsak Jukrkorn</b>	Thailand
<b>Asst. Prof. Dr.Intira Charuchinda</b>	Thailand
<b>Asst. Prof. Dr.Uten Thongtip</b>	Thailand
<b>Asst. Prof. Prasert Sae-iab</b>	Thailand
<b>Asst. Dr. Chanchai Vallisut</b>	Thailand
<b>Dr.Thanapoom Siringam</b>	Thailand
<b>Dr.Wisutthana Samutsri</b>	Thailand
<b>Dr.Athiya Rattanapittayapron</b>	Thailand

<b>Dr.Thongchai Khammee</b>	Thailand
<b>Dr.Jedsada Pratumsit</b>	Thailand
<b>Dr.Ganatee Gitgeatpong</b>	Thailand
<b>Dr.Sasithon Soparat</b>	Thailand
<b>Dr.Apichart Payakkin</b>	Thailand
<b>Dr.Potgana Boonkoun</b>	Thailand
<b>Dr.Chinawong Sringam</b>	Thailand
<b>Dr.Kwanming Khumprasert</b>	Thailand
<b>Dr.Kittiwan Sinthunava</b>	Thailand
<b>Dr.Supot Bhandhaniya</b>	Thailand
<b>Dr.Piyada Junwanna</b>	Thailand
<b>Dr.Piyalak Akkraratana</b>	Thailand
<b>Dr.Preeya Sompuet</b>	Thailand
<b>Dr.Sarawut Napatalung</b>	Thailand
<b>Dr.Suebwong Kalawang</b>	Thailand
<b>Dr.Chanansara Oranop Na Autthaya</b>	Thailand
<b>Dr.Wilaichitra Nilsawaddi</b>	Thailand
<b>Dr.Prathana Padungpote</b>	Thailand
<b>Dr.Kannaphat Nithiwaraphakun</b>	Thailand
<b>Dr.Palila Suntornsawate</b>	Thailand
<b>Dr.Sumai Binbai</b>	Thailand
<b>Dr.Paradorn Karnchanasutham</b>	Thailand
<b>Dr.Sathaporn Pokpong</b>	Thailand
<b>Dr.Anchali Atibaedya</b>	Thailand
<b>Dr.Niphon Suwannakut</b>	Thailand
<b>Dr.Sathaporn Pokpong</b>	Thailand

# LIST OF REVIEWERS

## SCIENCES AND TECHNOLOGY

Prof. Dr. Yusaku Fujii	Gunma University (Japan)
Prof. Dr. Preecha Yupapin	Ton Duc Thang University (Vietnam)
Prof. Dr. Jalil Ali	Universiti Teknologi (Malaysia)
Prof. Dr. D.N. Wang	China Jiliang University (China)
Dr.Phichai Yplao	Ton Duc Thang University (Vietnam)
Prof. Dr. Vasun Petcharat	Prince of Songkla University (Thailand)
Prof. Dr. Niwat Sanoamuang	Khon Kaen University (Thailand)
Prof. Dr.Booncharoen Sirinaovakul	King Mongkut's University of Technology Thonburi (Thailand)
Assoc. Prof. Dr.Tossawat Seetawan	Sakon Nakhon Rajabhat University (Thailand)
Assoc. Prof. Dr.Somsak Mitatha	King Mongkut's Institute of Technology Ladkrabang
Asst. Prof. Dr.Ravee Phromloungsri	Udon Thani Rajabhat University (Thailand)
Asst. Prof. Dr.Sawatsakorn Chaiyasoonthorn	Ramkhamhaeng university (Thailand)
Asst. Prof. Dr.Narong Sangwaranatee	Suan Sunandha Rajabhat University (Thailand)
Asst. Prof. Dr.Ravee Phromloungsri	Udon Thani Rajabhat University (Thailand)
Asst. Prof. Dr.Khunchai Cujareanpisan	Phranakhon Rajabhat University (Thailand)
Dr.Viboon Pensuk	Udon Thani Rajabhat University (Thailand)
Dr.Chanu Photiphitag	Suan Dusit University (Thailand)
Dr.Sappasit Thongmee	Ramkhamhaeng university (Thailand)
Dr.Nithiroth Pornsuwancharoen	Rajamangala University of Technology Isan Vocational (Thailand)
Dr.Chat Teeka	Suan Dusit University (Thailand)

# LIST OF REVIEWERS

## HUMANITIES AND SOCIAL SCIENCES

Prof. Dr. Adel Mohamed Hammam	October 6 University (Egypt)
Prof. Dr. Ian Smith	University of London (UK)
Assoc. Prof. Dr. Pham Quang	East China Normal University (China)
Assoc. Prof. Dr. Gao Huirong	East China Normal University (China)
Dr. Ly Huu Le	Can Tho University (Vietnam)
Dr. LE Xuan Mai	Can Tho University (Vietnam)
Asst. Prof. Dr. Arishai Akraudom	Bangkok University (International Reviewer)
Dr. Zeph Kai Norris	Dusit Thani College (International Reviewer)
Dr. Bartholomeus Wilhelmus Lambregth	Kasetsart University (International Reviewer)
Assoc. Prof. Dr. Suthinan Promsuwan	Bangkok University (Thailand)
Assoc. Prof. Dr. Prachyanan Nilsook	King Mongkut's University of Technology North Bangkok (Thailand)
Asst. Prof. Dr. Theathanick Siriwoharn	Valaya Alongkorn Rajabhat University under the Royal Patronage (Thailand)
Asst. Prof. Dr. Monton Janjamsai	Phranakhon Rajabhat University (Thailand)
Asst. Prof. Dr. Waravit Prasisphol	Phranakhon Rajabhat University (Thailand)
Asst. Prof. Dr. Snit Sitti	Maejo University (Thailand)
Asst. Prof. Dr. Akkarapon Nuemaihom	Buriram Rajabhat University (Thailand)
Asst. Prof. Dr. Nattaphon Rampai	Kasetsart University (Thailand)
Asst. Prof. Dr. Atsawin netpokeaw	National Institute of Development Administration (Thailand)
Asst. Prof. Dr. Ratchaneewan Tangpakdee	Maharakham University (Thailand)
Asst. Prof. Dr. Panita Wannapiroon	King Mongkut's University of Technology North Bangkok (Thailand)
Asst. Prof. Dr. Paktra Prasertwong	Chandrakasem Rajabhat University (Thailand)
Asst. Prof. Dr. Laksana Siriwan	Sukhothai Thammathirat Open University (Thailand)
Dr. Ophat Kaosaiyaporn	Prince of Songkla University (Thailand)
Dr. Chanettee Tinnam	Mahidol University (Thailand)
Dr. Watcharapong Intrawong	Kasetsart University (Thailand)
Dr. Oradol Kaewprasert	University of the Thai Chamber of Commerce (Thailand)
Dr. Suchat Saenpich	Kasetsart University (Thailand)
Dr. Paranya Palwisut	Nakhon Pathom Rajabhat University (Thailand)
Dr. Wichit Thepprasit	Chiang Rai Rajabhat University (Thailand)
Dr. Jantarawan Samransamruajkit	Chandrakasem Rajabhat University (Thailand)



# A Comparison of Stress and Behaviors of Stress Management between Employees in Public University and Private University in Bangkok

D. Kanjanamaneesathian<sup>a,e1</sup>, C. Litu<sup>a,e2</sup>

<sup>a</sup>Division of General Business, Faculty of Management Science, Silpakorn University, Phetchaburi IT campus, Cha-am 76120, Thailand

<sup>e1</sup>kanjanamaneesat\_d@su.ac.th, <sup>e2</sup>yummyim\_na@hotmail.com

## Abstract

This research aimed to compare the stress and behaviors of stress management between the employees in public university and those in private university in Bangkok. The subjects consisted of 144 employees from public university and 144 employees from private university in Bangkok. The results were (1) the employees in public university and those in private university in Bangkok had no difference in both level of stress and behaviors of stress management with statistical significance level of .05, (2) the employees in public university and those in private university in Bangkok had difference level of stress as this discrepancy was dependent upon salary with statistical significance level of .05. Nevertheless, gender, age, marital status and educational level had no bearing in the level of stress between these two groups, and (3) the employees in public university and those in private university in Bangkok was different in the behaviors stress management. This difference was affected by age, working period and salary with statistical significance level of .05. However, gender, marital status and educational level had no effect to the way in which these two groups exhibited behaviors of stress management.

*Keywords: Stress, Behaviour of stress management, Employees of the university*

## 1. Introduction

The teaching and supporting staffs are two main crucial personnel in the operation of the university. The roles of the teaching staffs are lecturing, supervising and evaluating the performance of the students. For postgraduate study, these roles also include giving guidance for research to the master and doctoral students. For the universities in Thailand, there are basically four main tasks for the teaching staffs, including teaching, researching, outreaching and disseminating Thai traditional culture.

Other routine tasks to streamline the operation of the teaching staffs are executed by the so-called "supporting staffs" in Thai universities. The routine tasks encompass the wide range of activities including providing guidance for students engaging in extra-curricular activities, administrating and advising the students to access the teaching resources, and maintaining the well-being of the university's environment. The smooth working relationship between these teaching and supporting staffs is paramount in delivering both academic and services to the students (Saiprom, 2005)

Selye (1978) stated that stress is the response of physical body and mind to both internal and external stimuli. This imbalance in the human's body between physiology and psychology affects decision making, interpersonal relationship and working efficiency negatively. Stress, however, is a common reaction which occurs for the people in all walks of life including workforce in the universities. The stress occurs as a result of the pressure from too many workload, extra responsibility, poor working environment, stringent organizational rules and regulations, and unsatisfactory incentives (Sae Wong & Na Ranong, 2015). Udomsat (2016), however, revealed that perceived unfairness of the leadership in the organization directly affected the organizational commitment of the employee in the university.

This research aims to focus the study on the stress and the behaviours of stress management between the employees in public university and those in private university in Bangkok. The study will not only bring about better understanding of the stress phenomenon among the employees in both public and private universities but also provide the platform for the university administrators to come up with more effective policy to manage the university. The hypothesis of this study is that the stress and stress management of the staffs of private university are different from those of public university.

## 2. Methodology

This research aimed to compare the stress and behaviors of stress management between the employees in public university and those in private university in Bangkok. There were four hypotheses, including (1) the level of stress of the employees of one public university is different from that of the employees of one private university (2) the level of stress of the employees of one public university is different from that of the employees of one private university based upon the personal factors (3) the employees of one public university is different from that of the employees of one private university with respect to how do they cope with stress, and (4) the employees of one public university is different from that of the employees of one private university with respect to the way of coping with stress based upon the personal factors.

The subjects consisted of 144 employees from each public university and private university in Bangkok, Thailand. These 288 employees were subject to the study using questionnaire which composed of four sections. The first part of the questionnaire contained the questions which elicited personal information, namely gender, age, marital status, education, length of employment and income from the subjects. The second part of the questionnaire contained the questions (invented by Department of Psychiatric Health) which intended to self-assess and self-analyze stress. The third part of the questionnaire contained the questions (Limmatthawapirat, 2010) which intended to elicit how do the subjects cope with stress and how do they reduce the stress, and the fourth part of the questionnaire contained recommendations and data analysis including frequency, percentage, means, standard deviation, t-test, F-test and one way analysis of variance.

## 3. Results

### 3.1 Analysis of personal data

Seventy-five percent of the employees of the public university were female. Almost 50 percent were with the age of 21-30 years old, with almost 70 percent having the single marital status. Almost 60 percent completed the Bachelor degree and 55 percent of these subjects had been working in the university for five years. Almost 30 percent possess the salary between 10,001 – 15,000 baht.

Comparing the information, sixty-two percent of the employees of the private university were female. Almost 34 percent were with the age of 21-30 years old, with almost 60 percent having the single marital status. About 68 percent complete the Bachelor degree and almost 43 percent of these subjects had been working in the university for five years. Almost 27 percent possess the salary more than 30,001 baht.

### 3.2 Comparison of the employees of a public and a private university in Bangkok

The self-assess and self-analyze of the level of stress between the employees of a public and a private university in Bangkok revealed no statistical significant difference (Table 1). There was also no statistical significant difference regarding the behavior the employees of public and private university in Bangkok used to cope with stress (Table 2). There was a statistical significant difference (at .05) in the level of stress as a result of the difference in an income (Table 3).

**Table 1** Comparison of the level of stress between the employees of public and private university in Bangkok (n=288)

Employees in	Mean	S.D.	t	Sig.
Public university	2.38	0.901	0.77	0.102
Private university	2.31	0.778		

\*statistical significant difference at .05

**Table 2** Comparison of the behavior of stress management of the employees of public and private university in Bangkok (n=288)

Employees in	Mean	S.D.	t	Sig.
Public university	1.51	0.52	0.572	0.924
Private university	1.47	0.52		

\*statistical significant difference at .05

**Table 3** Comparison of the stress level with respect to the different in an income (n=288)

Income (baht)	Mean	S.D.	F	Sig.
< 10,000	2.33	1.528	2.661	0.023*
10,001-15,000	2.43	0.838		
15,001-20,000	2.49	0.885		
20,001-25,000	2.33	0.982		
25,001-30,000	2.44	0.788		
>30,000	2.02	0.614		

\*statistical significant difference at .05

#### 4. Discussion

The self-assess and self-analyze of the level of stress between the employees of a public and a private university in Bangkok revealed no statistical significant difference (Table 1.). Setthasitpreeda (2010) also reported that the different in the working environments did not affect the level of stress in case study conducted in the B-care Medical Center hospital in Bangkok and in the food processing factory in Chachoengsao province, respectively. There was also no statistical significant difference regarding the behavior the employees of a public and a private university in Bangkok used to cope with stress (Table 2.).

The disparity of an income affected the level of the stress with statistical significant difference at .05 (Table 3). Other studies in the cabin crews at the THAI airway (Udommutjarin & Thongbai, 2012), the government officials at the Department of Revenue, Nakhon Pathom and Samut Sakhon province (Makrugsa, 2010) and the staffs of the B-care Medical Center hospital in Bangkok, Setthasitpreeda (2010) also revealed that disparity of the income between the staffs affected the level of stress in the workplace.

According to Selye (1978) who proposed that stress occurred as a result of the exposure to both internal and external stimuli. This study showed that an external stimulus, particularly the different in an income, was the cause that initiated stress regardless of the workplaces (private university or public university) (Table 3).

The difference in gender, age, marital status, education and working duration in the workplace of the employees in a public and a private university had no effect to the level of stress which according to the study of Pintunan (2000) who conducted the study in the blue collar workers of the electronic industry and also found that gender, age, marital status, education and working duration in the workplace did not affect the level of stress of these workers.

In this study, there was also no statistical significant difference regarding the behavior the employees of public and private university in stress management (Table 2). Wangeamsermsuk (2011) also showed that there was also no statistical significant difference regarding the behavior the employees of Communication Authority of Thailand (CAT), Lak Si Branch and those of CAT, Bang Lak Branch used to cope with stress. Sinjutturus (2002) compared the behavior of stress management between middle-age women in the urban area with those in the rural area and there was no statistical significant difference between these two groups.

The employees in public university and those in private university in Bangkok were different in the behaviors of stress management. This difference was affected by age, working period and salary with statistical significance level of .05. Areeya (2007) also found that difference in an income of the out patients receiving the medical treatment at Mongkut Kao hospital did exhibit different behaviors in coping with the stress.

However, gender, marital status and education level had no effect to the way in which these two groups exhibited behaviors of stress management. Pintunan (2000) studied the behavior of the workers in the electronic industry and found that gender and marital status did not affect the way in which these workers managed stress (either encountering the stress objectively with the aim to solve the cause of the stress or dealing with one emotion subjectively).

Nonetheless, further research should be conducted to explore other factors (such as leadership, organizational structure and the needed supportive policy for career advancement in the universities) which might affect the level of stress and stress management.

## Acknowledgements

The authors would like to thank the Faculty of Management Sciences, Silpakorn University, Phetchaburi IT campus, Cha-am, Phetchaburi, Thailand for supporting the first author to present this work at the 8<sup>th</sup> International Science, Social Science, Engineering and Energy Conference, Pattaya Beach, Thailand.

## References

- [1] Areeya, A. (2007). *Stress and Behaviors of Stress Management of the Out-Patient Department in Phramong kutkiao Hospital*. Retrieved from <http://qa.kbu.ac.th/fismain/thai/thesis/thesisdetail.asp?id=83>.
- [2] Limmatthawapirat, S. (2010). *Correlation between stress and stress coping behavior in operation of the revenue officers of Revenue Region 6*. M.A. independent study (Public and Private Management). Silpakorn University. Nakhon Pathom.
- [3] Makrugsu, T. (2010). *The comparison of the state of mental health between the staffs of Regional Revenue: A case study between Nakhon Pathom and Samut Sakorn area offices*. M.A. independent study (Public and Private Management). Silpakorn University. Nakhon Pathom.
- [4] Pintunan, S. (2000). *Stress and coping methods of operational workers in electronic industry*. M.Sc. thesis (Counseling Psychology). Ramkhamhaeng University. Bangkok.
- [5] Sae Wong, K., & Na Ranong, L. (2015). "Factors affecting the stress in work performance of instructors in Princess of Naradhiwas University". *STOU Education Journal*. 8(2): 174-187.
- [6] Saiprom, N. (2005). *The relationship among perceived organizational justice, organizational commitment and organizational citizenship behavior of employees in the private University*. M.Sc. thesis (Industrial Psychology). Kasetsart University. Bangkok.
- [7] Selye, H. (1978). *The stress of life (Rev. ed.)*. New York: McGraw-Hill. ISBN 9780070562127.
- [8] Setthasitpreeda, S. (2010). *Factors affecting on employee's stress: A case study of medical center B. care hospital, Bangkok*. M.B.A. independent study (General Management). Rajamangala University of Technology Thanyaburi. Pathum Thani.
- [9] Sinjutturus, A. (2002). *A comparative study stress management behavior of the middle age women in urban and rural household, Khon Kaen province*. M.P.H. thesis. Khon Kaen University. Khon Kaen.
- [10] Udommutjarin, S., & Thongbai, K. (2012). "Comparison of stress levels on personal factors of cabin attendants of THAI AIRWAYS international public company limited". *Modern Management Journal*. 10(1): 119-129.
- [11] Udomsat, S. (2016). *The Model of factor management for development of organization commitment of personnel in physical education institutes in Thailand*. Ph.D. thesis (Sport Science). Kasetsart University, Kamphaeng Saen, Nakhon Pathom.
- [12] Wangeamsersuk, S. (2011). *The study of comparison of the factors affecting the stress and stress coping behavior in operations of state enterprise employees: A case study of the employees of the CAT TELECOM public company limited, Laksi office and Bangkok office*. M.B.A. independent study (Entrepreneurship). Silpakorn University. Nakhon Pathom.