

RJSH



ISSN 2286-976X

Online

ISSN :2539-5513

RANGSIT JOURNAL OF
SOCIAL SCIENCES AND
HUMANITIES

July - December 2019
Volume 6 Number 2

Gea

ISSN 2286-976X / Online : ISSN 2539-5513

RJSH

RANGSIT JOURNAL OF SOCIAL SCIENCES AND HUMANITIES

Volume 6, Number 2, July – December 2019

Published by:

Rangsit University, Pathum Thani, Thailand

Copyright © 2014

Editorial Office:

Rangsit University Research Institute, Rangsit University

52/347 Paholyotin Road, Pathum Thani 12000, Thailand

Phone: + 66 (0) 2 997 2222 ext. 1074 , Fax + 66 (0) 2 791 5689

Email: rjsh@rsu.ac.th

Website: <https://rjsh.rsu.ac.th>

This page intentionally left blank

ADVISORY BOARD

- Andrew-Peter Lian, Ph.D.
Professor, Suranaree University of Technology, Thailand
- Arthit Ourairat, Ph.D.
Rangsit University, Thailand
- Brian Gibson, Ph.D.
Professor, TOP Education Institute, Australia, Newcastle Business School, Australia
- Fumi Masuda
Professor, Tokyo Zokei University, Japan
- Nares Pantaratorn, Ph.D.
Assistant Professor, Rangsit University, Thailand
- Sompong Sucharitkul, Ph.D., LL.M., D.C.L.
Professor, Rangsit University, Thailand
- Varakorn Samakoses, Ph.D.
Associate Professor, Dhurakij Pundit University, Thailand
- Wichit Srisa-An, Ph.D.
Professor Emeritus, Suranaree University of Technology, Thailand

EDITORIAL BOARD

- Anusorn Tamajai, Ph.D.
Assistant Professor, Rangsit University, Thailand
- Carmine Bianchi, Ph.D.
Professor, University of Palermo, Italy
- Chaiyosh Isavorapant, Ph.D.
Assistant Professor, Silpakorn University, Thailand
- Eakachart Joneurairatana
Professor, Silpakorn University, Thailand
- Estelle Alma Maré, Ph.D.
Professor, Tshwane University of Technology, South Africa
- Jan Golembiewski, Ph.D.
Professor, The University of Sydney, Australia
- Jomdet Trimek, Ph.D.
Assistant Professor, Rangsit University, Thailand
- Krisanaphong Poothakool, Ph.D.
Associate Professor, Rangsit University, Thailand
- Lam Yan Yan, Ph.D.
Hong Kong Design Institute, Hong Kong, China
- Nam Hoang, Ph.D.
University of New England, Australia
- Normah Omar, Ph.D.
Professor, Universiti Teknologi MARA, Malaysia
- Omar Al Farooque, Ph.D.
Associate Professor, University of New England, Australia

Peeradorn Kaewlai, Ph.D.
Assistant Professor, Thammasat University, Thailand

Peter Duff, Ph.D.
Professor, University of Aberdeen, UK

Praveen Nahar, Ph.D.
Professor, National Institute of Design, India

Surachai Sirikrai, Ph.D.
Thammasat University, Thailand

Surichai Wankaew
Professor, Chulalongkorn University, Thailand

Susumu Ueno, Ph.D.
Professor, Asia-Pacific Management Accounting Association, Japan

Sutham Cheurprakobkit, Ph.D.
Professor, Kennesaw State University, USA

Suthiphand Chirathivat, Ph.D.
Professor Emeritus, Chulalongkorn University, Thailand

Theera Nuchpiam, Ph.D.
Assistant Professor, Chulalongkorn University, Thailand

Vichoke Mukdamanee
Professor, Silpakorn University, Thailand

Visarut Phungsoondara, Ph.D.
Thammasat University, Thailand

EDITOR-IN-CHIEF Anek Laothamatas, Ph.D.
Professor, Rangsit University, Thailand

ASSOCIATE EDITOR Pisrapai Sarasalin
Associate Professor, Rangsit University, Thailand

ASSISTANT EDITOR Kanitsorn Terdpaopong, Ph.D.
Assistant Professor, Rangsit University, Thailand

MANAGING EDITOR Nootjaree Lohakarn
Rangsit University, Thailand

RANGSIT JOURNAL OF SOCIAL SCIENCES AND HUMANITIES (RJSH)

Volume 6, Number 2, July – December 2019

Editor's Note

Socrates, a well-known philosopher in ancient Greek once quoted that “True knowledge exists in knowing that you know nothing”. When we accept the fact that we need to read and understand more to gain knowledge and escape from ignorance, then only we are in the same boat as Socrates. By all means, same goes to writing as when we write something, simultaneously we gain more understanding and insights to the area that we place our focus and concentration. It needed such courage and one bestowed by plentiful of ideas so that we are able to provide the best writings to the readers out there. Writing needs utmost commitments as well as ample intelligents, so that the idea disseminated in a creative way, avoiding dull and boring conveyance methods.

From the start of the RJSH journal, the publication team has just one intention, to spread knowledge to the audiences out there. Now, the journal's journey has already past six (6) years in the writing profession. Never in our thoughts that we set our foot here, trying to be one of the best journal in the country. However, deep inside our heart we reckon that we could be the best in supplying high impact journals to the readers out there. In short, we are aiming to be the best although we still far away from the much-anticipated destination.

Let us go through all the five (5) articles provide eventful discussion and information to the readers out there. The first paper tells us about the perspective and prospect towards current and future livelihood of Bangkok generation Y. The author, Rawisara Chulerk then tries to explore the perspective and prospect of Generation Y towards current and the next 30-year livelihood in Live-Work-Play dimensions. Based on the study, Generation Y designs their lifestyle based on the concept of hedonism that referring to their goal of pleasure.

The second paper will provide us with sufficient insights on the misuse of prescription drugs cognitive enhancement among Iranian University students. The group of writers lead by Habeeb Abdulrauf Salihu, intends to examine the misuse of such drugs whereby 1800 samples of data were analysed. The outcome revealed the fact that adequate public concern shall be in tandem to intervene with the misuse of drugs among Iranian university students.

Flying to our neighbours, the article is about the authors voice in selecting equivalences in the translation into Malay of Raja Bilah and the Mandailings in Perak, Malaysia. For some scholars of translation studies like André Lefevere, translation is a manipulation of some extrinsic factors such as ideology, dominant poetics and patronage. Basically, this article attempts to study on the concept of patronage which was introduced by Lefevere in the translation of a social history monograph from English into Malay which affected the equivalent of lexical choices and the choices of translation procedures used in the work of translation.

The fourth paper by Ananyawat Ratanawichai and Sasiphattra Siriwato is a case study about the border patrol police in Chiang Rai province. The research has two objectives, as the first one is in line with the establishment of the border patrol police which are upheld to prevent and suppress against narcotics. The second objective is proposing solution and recommendation in preventing and suppressing drug trafficking network at the border's vicinity. The research found that major problems and obstacles to combat drug trafficking such as searching for news and intelligence, managing and administrating as well as coordination with other organisation or agencies.

It is important to know the latest changes or amendments made in the accounting world. That is why the group of authors lead by Pandate Romsaitong doing a systematic review exploring the effect of and risk mitigation methods surrounding the new IFRS 16. The new standard took effect in January of 2019 and defines a non-cancellable period within a lease term. Several findings meted out here include: 1) High-profile businesses were deemed to be most impacted; 2) IT tools are available but primarily relate to the effective and accurate practice of accounting methods rather than impacts of regulation. Some businesses use accounting method such as smoothing to create more advantageous reports; 3) Software and IT tools can aid businesses in reducing administrative and human labor costs, along with other benefits.

The papers need to be read with full focus and concentration yet it demands a good understanding by the audiences out there as they are produced with extra care and due diligence by the authors. Therefore, no page shall be skipped or being ignored by the reader out there. By being meticulous and giving ample level of concentration, then only we could gather a lot of information and knowledge, with this kind of in-depth reading.

In a nutshell, that is why journals such as RJSH exist: to create a bridge for knowledge-seekers (learners) with producers of knowledge (researchers). As the editorial team, we perceive this as our job: sharing new knowledge, including alternative ways of understanding the complex issues that happen in our daily life as well as on our societies in general.

We welcome your comments and, of course, your manuscripts. Links to our manuscript submission site can be found at RJSH Online Submission and Review System: <https://rjsh.rsu.ac.th>. We look forward to hearing from you.

Sincerely,



Anek Laothamatas
Editor-in-chief

RANGSIT JOURNAL OF SOCIAL SCIENCES AND HUMANITIES (RJSH)
Volume 6, Number 2, July–December 2019

CONTENTS

	Page
Editor's Note	
<i>Anek Laothamatas</i>	i-ii
Research Articles:	
1. Perspective and Prospect towards Current and Future Livelihood of Bangkok Generation Y..... <i>Rawisara Chulerk</i>	1-12
2. Misuse of Prescription Drugs as Cognitive Enhancement among Iranian University Students: Evidence from an Empirical Investigation <i>Habeeb Abdulrauf Salihu, Monsurat Isiaka, Kayode Abdullahi Ibrahim, and Obasanjo Solomon Balogun</i>	13-23
3. The Author's Voice in Selecting Equivalences in the Translation into Malay of Raja Bilah and the Mandailings in Perak: 1875-1911 <i>Eliza Syuhada Rosli, Ummi Umairah Kahar, and Idris Mansor</i>	25-32
4. The Performance of the Prevention and Suppression of Narcotics by the Border Patrol Police: A Case Study of Border Patrol Police Company 327, Chaing Rai Province <i>Ananyawat Ratanawichai and Sasiphattra Siriwato</i>	33-42
5. A Systematic Review Exploring the Effect of and Risk Mitigation Methods Surrounding the New IFRS 16 <i>Pandate Romsaitong, Molsikarn Tripattanasit, and Tatinat Santisant</i>	43-59
Appendices:	
APPENDIX A : Acknowledgements	A-1-3
APPENDIX B : Note for Authors.....	B-1-6
APPENDIX C : Research Article Template.....	C-1-5
APPENDIX D : Manuscript Submission Form.....	D-1
APPENDIX E : Copyright Transfer Agreement (CTA).....	E-1

This page intentionally left blank

Perspective and Prospect towards Current and Future Livelihood of Bangkok Generation Y

Rawisara Chulerk

Faculty of Architecture and Planning, Thammasat University, 12121 Thailand
E-mail: myrawis.c@gmail.com

Received 26 June 2019 / Revised 4 July 2019 / Accepted in final form 8 July 2019 / Publish Online 20 July 2019

Abstract

This article, as the preliminary part of the research entitled “The Forecast of Next 30-Year Livelihood of Generation Y based in Bangkok”, aims to explore the perspective and prospect of Generation Y towards current and the next 30-year livelihood in Live-Work-Play dimensions as the introductory data to be generated as multiples observed variables for factor analysis in the further stage of the full research. Since Live-Work-Play is the non-boundary lifestyle of Generation Y, it defines the particular characteristics of this major population. The study is conducted by studying the related theories, researches and concepts, as well as the in-depth interview of the five subjective Bangkok Generation Y, aged between 25-35 years old, towards the livelihood in Live-Work-Play dimensions to obtain the perspective and further or unexpected information from the respondents. The in-depth interview covers the topics of general lifestyle and attitude in Live-Work-Play dimension, current livelihood, prospect of the future livelihood, and the influence of changing Live-Work-Play on living space in the future.

According to the study, Generation Y designs their lifestyle based on their ‘hedonism’ or the goal of pleasure. They do everything based on what they want, prefer and make them pleased as their ‘own choice’ driving to the various particular independent behaviours in live, work and play dimensions. In Live dimension, family and transportation are the significant keys of their life decisions, for example the dwelling physical and location requirements, and daily life. Work is chosen from their preference to fulfil their life-purpose. The format and time are also their own choice. And for Play aspect, relaxation activities are the preferred non-compensation activities to fulfil their pleasure. Therefore, Live-Work-Play lifestyle allows them to balance the personal and professional life to have the leisure time for their satisfied activities.

The key issues summarized from the study will be the guideline to generate the observed variables utilized for exploring the relevant factors of current and the next 30-year livelihood of Generation Y in order to forecast their future livelihood. Thus, it is the initial leading to the further study of long-term plan, and designing supportive space to be liveable with well-being in the future.

Keywords: *Generation Y, Livelihood, the Next 30-Year Livelihood, Live-Work-Play, Generation Y Lifestyle*

1. Introduction and Literature Review

Generation Y, or the group of people, born in 1980s-2000, is currently the world’s and also Thailand’s largest group of population, approximately 28% of Thai population (Department of Provincial Administration; 2016 Economic Intelligence Center, 2014). Due to the continually declining birth rate, Generation Y will be the greatest number of population in the future.

Due to growing up in the digital transition era and having the comprehensive support from their parents, Generation Y is the most literate generation, self-reliance, giving prioritization on their preference, intensive fluency in digital trends, having dynamic and rapid life and preferring work-life blend (CBRE, 2016; Goldman Sachs Group, 2017; Hakuho Institute of Life and Living ASEAN, 2017; Jivanun, 2013; Thailand Creative & Design Center, 2017). Their particular lifestyle is defined to the integration of “Live-Work-Play”, 3 non-boundary dimensions of Generation Y’s lifestyle and behaviour (CBRE, 2016). As the major group in the society and currently being in the marketing spotlight, the specific requirement and lifestyle of Generation Y tend to shape the direction of the economy, shift the aspect of design in various industry in the future. Besides, their particular lifestyle and behaviour in Live-Work-Play dimensions of Generation Y will contribute the direction of living in the future livelihood.

Besides, projecting the next 30-year, this largest group of population will approach their elderly stage, and also form to the largest group of elderly generation. To understand the particular lifestyle of this future largest elderly is an interesting and important issue to be considered in order to prepare, develop and design the supportive space for this major group in the society. Therefore, this paper, as the preliminary of

the study of forecasting the next 30-year livelihood of Bangkok Generation Y, aims to explore the perspective and prospect towards current and the next 30-year livelihood prospect of Generation Y as the introductory data for the further study regarding the livelihood of this major population.

1.1 Generation Y

Generation Y, born between 1980s and 2000, is the group of Baby Boomers' and Generation X's descendants. They were born in the transition period, from analogue to digital, which is the era of the flourish technology (Tapscott, 2009; TCDC, 2017; Van den Bergh & Behrer, 2011; Zemke, Raines, & Filipzak, 2000). According to Kit and O'Donnell (2009), Generation Y lives in the digital world since they were born with the advanced development of technology, especially the internet. Then, it shapes Generation Y to have the distinctive characteristics comparing to other previous generations. Due to growing up with the computer, internet and complete technology, Generation Y tends to have the multi-skills, be capable of traditional and new media, be high self-confident, emphasize on creating and preserving relationships, precise considering and desire of rapid life (Kit & O'Donnell, 2009 ; Tapscott, 2009).

The general characteristics of Generation Y is summarized that they are self-reliance, believing of making the future better, prioritizing on image and apparel, giving value to the connection with peers, the internet discernment, proficient multi-taskers, learning-oriented, familiar with changes, goal-oriented, preferring work-life blend, and being out of the rules (Dickey & Sullivan, 2007; Donnelly, 2008 ; Eisner, 2005; Gerritsen, 2008; Koco, 2006; William, Page, Petrosky, & Hernandez, 2009)

Even though overall Generation Y has the similar behaviours, attitude, and characteristics, the wide range of ages leads to variation among the group. Then, Generation Y is categorized into sub-group in order to better understand the insight of this generation in both academic and marketing aspects (Stanley, 1995).

Thai Generation Y is categorized into three sub-groups, considering from the grown up, learning, and historical experience according to the different born-year period, which are as follows (Mongkolsiri, 2005):

- (1) Early Generation Y, currently 18-22 years old, is the group that is still studying at university. This group was born in the time of advanced technology development, especially the completely developed internet network. Then, it shapes this group of Generation Y to be digital natives and fluent in technology.
- (2) Early Nester or Mid-Generation Y, currently 23-27 years old, is generally the first jobbers. They are in the stage of attempting to have a stable life. They were born along with the developing of technologies, which encourages them the adaptation of new ideas, especially technology (Sirakidakorn, 2011).
- (3) In-Between Generation Y or Late-Generation Y, currently 28-32 years old, is the group that has some similar characteristics with Generation X. This group is rather stable in work and life; some might be junior executives in an organization or be an entrepreneur. In-Between Generation Y was not born with the complete development of technology, therefore; they are digital immigrants and adaptive of technology, driving them capable in both analogue and digital media (Sirakidakorn, 2011).

1.2 Live-Work-Play of Generation Y

Thailand Creative and Design Center (TCDC,2016) defined the characteristics of Generation Y in the annual trend summary report named "Trends 2017: Blurring the Line". Generation Y places value on self-development and balance of life (work-life balance) which leads to changing attitude, behaviour and lifestyle comparing to the previous generations. They also give the importance to and support travelling and exploration as a top ranked lifestyle activity. From the characteristic of valuing time and experience seeking, this generation prioritizes on sustainability and health that drives establishment of an abundance of new business.

Thus, it reveals the characteristic of integrating personal and professional lifestyle of Generation Y. Each facet of life determines and affect each other. Not only living and work, but also the relaxation can be defined as another aspect involving work and life. Live-Work-Play is the paradigm to define the balance of three dimensions in personal (live and play) and professional (work) life of Generation Y. Generally, Live-

Work-Play is focused by the marketing researcher in order to develop the responsive product and service to the consumer's requirements.

1.2.1 Live

Generation Y tends to prioritize on self-development and individual lifestyle and independence. They believe the higher education leading to the better job and opportunities (The United Nations Population Fund Thailand [UNFPA], (2016). They also prefer to do their preference in their elderly stage. Therefore, they tend to delay their family plan. Having family and descendants becomes personal choice, instead of parent's decision as the previous generations. Then, it leads to the change of family plan: late marriage, being single, non-married living together, married without having children (Isarabhakdi, 2014). They also prefer to live in nuclear family, leading to the decreasing household size. Consequently, the life cycle of Generation Y has been shifted due to the different opinion towards life plan. Besides, all factors also lead to the shift of demographic condition which is the declining birth rate of the new generation.

Growing up in the high sense of urbanization, Generation Y has the dynamic lifestyle and tends to prioritize on the mobility and transportation which influence their overall lifestyle. They tend to have low tolerance for a long travelling in each day. Most of Generation Y is not willing to spend more than 30 minutes travelling from residence to work (CBRE, 2016). They also desire to use public transportation and reduce travelling by private car (Economic Intelligence Center [KIC], 2014; KRC Research, 2010). Generation Y would rather choose to live in the reachable walking distance or easily take public transportation location in order to reduce travelling time and distance (Frontier Group, 2012).

In an aspect of dwelling decision, the personal reasons, for example satisfied expense for dwelling, marriage status, household size and lifestyle, are involved the requirements of dwelling. Likewise, family life cycle, as the indication of family turning point, leads to the different behaviors and requirements of people and also leads to the different requirement of dwelling in each stage of life.

For the health consciousness, Generation Y gives the priority to the wellness concern, since stress from work affects the unusual rapid aged. According to The Survey on Physical Activity 2015 of National Statistical Office (2015), Generation Y is interested in outdoor and indoor activities, and spends averagely 1.34 hours per day on exercise. Due to the weather, limited space for exercise and the rapid lifestyle, gym becomes one of the most popular exercising choices of Generation Y (Panpheng, 2015).

1.2.2 Work

Generation Y gives the importance to the preference when they consider of work decision (OKMD, 2016). They focus on commuting time, location, and flexibility as priorities (CBRE, 2017). Most of them give the precedence on work and life balance, flexible work time and workplace. They believe that the productivity does not depend on work hours but the results achieved over time-invested which is the different mindset from the previous generations that are familiar with working hard to get the advancement (PricewaterhouseCoopers [PwC], 2013). The significant keys defining the work preferences of Generation Y are: having power to manage their own job, flexibility, challenging, sociable working environment, appropriate support for the good worker, and working with the clear communication (The Opportunity: Knowledge Series by Office of Knowledge Management and Development [OKMD], 2016). Besides, being the digital native and digital immigrants, Generation Y utilizes the advanced technology and digital tools to facilitate their work. They tend to perform remote working or working outside the office by utilizing the online tools (Tanmanasiri, 2016, p. 20-21).

1.2.3 Play

As Generation Y is independent, confident, enthusiastic, sociable, flexible and self-oriented, the lifestyle of this group tends to be the activities fulfilling their desires. Generation Y always joins the activities enhancing both physical and mental health, such as travelling, exercising, and etc. (TCDC, 2017). They prefer spending time and money on experience and activities, such as travelling, entertainment, joining music festival and dining, more than previous generations. Most of Generation Y believe that experience is the part that fulfills their life (Belfatvibe, 2015).

Generation Y prefers to travel to both domestic and international destination with their own trip plan (Lerspipatthananon, 2018). The travel frequency of Generation Y is averagely 1-3 times per year. The strong influencing from social media drives Generation Y more travelling decision. Generation Y prefers travelling as the relaxation activity since it allows them to reduce physical and mental stress. Besides, travelling also provides them a new experience and community (Šimková & Holzner, 2014).

In aspect of shopping, due to the convenience of digital technology and personal mindset, Generation Y has the purchasing decision based on the personal image contribution of the items and the shareable-experience shopping. They also proficiently use both online and offline channels to explore the information or reviews from the previous purchasers in order to get the most valuable items (EIC, 2014; Hakuhodo Institute of Life and Living ASEAN, 2017). Generation Y tends to shop via online platform averagely 4.7 days per month while visiting the shopping center 3 days a month (CBRE, 2016). Although online channels provide them the additional alternative to get the best item in the most convenient way, the physical store is able to provide them more of the experience and social engagement.

2. Objective

To explore the perspective and prospect towards current livelihood and the next 30-year livelihood of Generation Y regarding Live-Work-Play dimensions

3. Material and Methods

This paper is the preliminary part of the research entitled “The Forecast of Next 30-Year Livelihood of Generation Y based in Bangkok” to explore the perspective and prospect towards current and the next 30-year livelihood of Generation Y. It is designed as a qualitative research utilizing in-depth interview with the subjective participants to understand opinion, further or unexpected information and attitude towards current livelihood and the next 30-year livelihood prospect in Live-Work-Play dimensions of the sample group.

The research focuses on only Bangkok Generation Y aged between 25-35 years old, or the Early Nester and In-Between Generation Y, as the group with a rather stable life and work (Mongkolsiri, 2005).

The five participants are also the urban Generation Y population who graduated bachelor's degree and above. They are the representatives of the highly educated, intellectual, having credible professions, and fluency with technology persons, which are the conforming characteristics regarding the concepts of Generation Y (CBRE, 2016; Goldman Sachs Group, 2017; Hakuhodo Institute of Life and Living ASEAN, 2017; Jivanun, 2013; TCDC, 2017). The samples are covering various occupations and working formats: freelancer, entrepreneurs, state enterprise officers, and private office employee. They were finally selected after several oral tests regarding articulation and vision concerning livelihood.

The outcome of this paper is an introductory data to be transformed and generated as multiple observed variables for the further quantitative research – the survey of approximately 400 Bangkok Generation Y samples, which is to explore the relevant factors determining Generation Y's current and the next 30-year livelihood in the further stage of the full research.

4. Findings

The in-depth interview, from five samples of 25-35 years old Bangkok Generation Y, covered the topics: the perspective about Live-Work-Play and the prospect of future Live-Work-Play of Generation Y.

The basic information of the five interviewees are summarized as the following table:

Table 1 Information of the interviewees

No.	Gender	Age	Occupation	Education
1	Female	34	Curator and Writer (Freelancer)	Master's Degree
2	Male	28	Entrepreneur	Bachelor's Degree
3	Male	25	State Enterprise Officer	Bachelor's Degree
4	Female	26	Architect (Private Office)	Master's Degree
5	Male	31	State Enterprise Officer and Entrepreneur	Bachelor's Degree

The interview is conducted with approximately 25 questions about Generation Y unique lifestyle and attitude, the key factors that affect their lifestyle, living place and related variable based on Live-Work-Play dimensions. The summary of all interview are described as follows:

4.1 General Lifestyle and Attitude based on Live-Work-Play of Generation Y

Lifestyle of Generation Y seems to be like a loop. They do not distinctly separate live, work and play since all aspects always both directly and indirectly involve each other. The significant keyword that drives the particular lifestyle of Generation Y is hedonism – the goal of pleasure. Generation Y does everything based on what they desire, prefer and make them pleased as their ‘own choice’. This drives to the various particular independent behaviors in live, work and play aspects.

Besides, Generation Y people tend to be more flexible and be able to cope with any changes. Dynamic lifestyle leads to the group of ‘nomad people.’ Although abundant of Generation Y still settles down in some place similar to the previous generation, there are some of them believe that settle in only one place is unnecessary. People used to feel that they need to be belonged to some place, but this group believes that their lives are adjustable as they prefer it to be.

4.2 Current Livelihood based on Live-Work-Play

4.2.1 Live (current condition)

Family life cycle

Family is the major criteria affecting Generation Y lifestyle choice. However, in the present, marriage becomes a choice depending on their own preference – choosing to have family or being single. Therefore, Generation Y tends to choose a spouse who enjoys the same activities or has the same idea. Nuclear family or individual unit family is the preferred choice of family type instead of extended family as previous generations.

Financial status

For financial status, due to hedonism lifestyle, Generation Y tends to have high expense. Since they spend on their current preference that affects the high expense. In addition, they are the generation that has high income since young compared to other generations.

Living place and transportation

For living place, living in the city is the most suitable choice for their lifestyle. Since travelling is the major key in their everyday life, the location that is convenient in transportation is prioritized for the dwelling decision. They prioritize time as the most precious asset, therefore; people tend to concern with travelling duration rather than distance. In accordance with existing surveys and studies, the maximum duration for travelling to work that is accepted is approximately 30 minutes to 1 hour.

In term of physical of residence, size of living place depends on number of members in the household. The more space in the dwelling provides the more comfortable feeling. Even though not all kinds of room are occupied in everyday, they keep spending their time in the same space. Besides, Generation Y seems to spend much time in common space or public space like co-working space, fitness center, common room, lounge, etc., which supports their lifestyle and provide them more sociable sense.

Health consciousness

In term of health consciousness, the major indicator of health consciousness, which is important and influences on Generation Y lifestyle, is exercise. A number of Generation Y manage their routine to consist of time for exercise. The preferred exercise formats are both sport or group activities and individual exercise. Therefore, it correlates to the time arrangement from work or others lifestyle activities. The exercise place is chosen from the time arrangement, since people will choose the convenient place which is appropriate to their routine.

4.2.2 Work (current condition)

In Work dimension, harmonizing with live dimension, the career selection of Generation Y is also influenced by hedonism. People tend to choose a career according to their life purpose. Apart from compensation, stability, location of workplace and other general criteria of job determination, life purpose is the remarkable factor of job choosing for people in this generation. Although a number of researches or studies indicate the trend of changing working pattern that young generation prefers freelance job or being entrepreneur rather than traditional office work or routine job, all of the interviewees have constantly routine in their everyday life, even they work differently (freelance, office worker and entrepreneur). They desire their preferred routine that responses to their personal lifestyle. The flexibility is another relevant preference. They desire to have power to manage their own job in the time, place or platform they prefer. Then, technology device or digital tools are utilized in order to fulfil the desire of flexibility – reducing worktime or outside-office working.

4.2.3 Play (current condition)

In the Play aspects, to define the relaxation and lifestyle activities is considered by the sense of voluntary – non-compensation activities. Relaxation and lifestyle activities fulfil life purpose and pleasure of Generation Y. The significant factor that directly relates to Play is time. Time is the obstacle of relaxation activities; hence, referring loop of lifestyle that integrates Live-Work-Play together to response personal pleasure, people will manage themselves to have leisure time for the satisfied activities.

4.3 Prospect and Expectation of Next 30-Year Livelihood based on Live-Work-Play

4.3.1 Live (future prospect and expectation)

Prospect Live of Generation Y in the future, due to the personal choice of living and family plan, especially if they are living without descendants, the more self-reliance and independence of ageing Generation Y will be. In the dwelling aspect, due to the limitation of space for residence, housing affordable and various factors, people will have personal space as necessary and share more public sharing space. Moreover, smart home as the product of human in the present will be more advanced in the future and might be much accommodate people in their ageing stage. Especially, Generation Y people who are familiar with technology since the present will be able to utilize that advanced technology efficiently. For health consciousness, according to the developed medical technology, people will concern more on health leading them to be healthier.

4.3.2 Work (future prospect and expectation)

Work of Generation Y in the future, the healthy longer live of people will lead to the longer work. Currently, many of 60-year-old people share the idea that they are extremely ready to work at 60, from long-term collecting experiences and skills; however, they have to end up because of their physical. For Generation Y who works to fulfil their life purpose and as the generation that decreased rate of marriage and having child, in the future, retired Generation Y might prefer to continue working in order to keep themselves active and apply their skills continually.

4.3.3 Play (future prospect and expectation)

Play of Generation Y in the future, as work in that time might not be actual 'work', job after retirement might be implied as one of after-retirement activity, since it is a choice that people choose to do. Most time of Generation Y might not be mainly arranged for work since, for the retirement period, the significant 'Play' activities are the preferred activities to avoid being lonely, for example socialization, hobbies or exercise as much as their physical being able to do.

4.4 Prospect and Expectation of Next 30-Year Livelihood based on Live-Work-Play

The loop lifestyle – no distinction of Live-Work-Play, drives to the requirements of integrated and compact space supporting their lifestyle. Combining with the dynamic lifestyle, the space should also be flexible. The decreasing child or living alone might cause the tendency of having some other people get relate

with them, for example living with friend in the same age, or having caretaker for elderly, etc. The space might need to be considered in order to support the involving of other people as well as the adjusted activities or lifestyle in each period of life. Besides, as mentioned, people will have personal space as necessary according to the limitation and affordability of residential space, and have to share more public sharing space. The present signage that people starts sharing data, information and developing to workplace or ride, co-housing or house sharing probably obviously occurs in the future.

4.5 Keywords Summarization

The relevant keywords from the interview are summarized as the following table:

Table 2 Keywords from in-depth interview

Dimension	Topic	Current	Future
Live	Family	Marriage as a choice – having family or being single	More self-reliance & independent
		Nuclear family	
		Living in the city	
	Transportation	Transportation = Major key impact of lifestyle	N/A
		Convenient transportation location	
		Concern on travelling duration rather than distance	
		Maximum 30 minutes to 1 hour	
	Residence	Size of residence depends on size of household	Smart home Space as necessity Share more public usage
		More space = More comfort	
		Public space & Common space	
	Healthcare	Healthcare correlates to time arrangement	
Work		Preference	Longer work Keep active Self-Reliance
		Life-purpose	
		Stability	
		Location	
		Compensation	
		Own time = preferred routine	
Play		Sense of voluntary	Avoid being lonely
		Fulfil life purpose & pleasure	
		Time = significant factor	

5. Discussion

Generation Y gives the precedence on ‘hedonism’ leading them to the particular lifestyle and requirements as they prefer.

They are self-reliant, independent, confident and flexible, which are according with the existing study of Generation Y characteristics by CBRE (2016); Dickey and Sullivan (2007); Donnelly (2008); Eisner (2005); Gerritsen (2008); Goldman Sachs Group (2017); Hakuhood Institute of Life and Living ASEAN (2017); Jivanun (2013); Koco (2006); William et al. (2009); TCDC (2017, pp. 20-23).

In Live dimension, family is one of the key factors effecting the lifestyle choices of Generation Y. Having family becomes the personal choice of people in this generation. They tend to choose the spouse who has the same interests or attitude. Conforming with the study of attitudes of young people about getting married and having children by Isarabhakdi (2014), the decision of having family is the individual choice of Generation Y instead of depending on parents’ decision. Besides, Generation Y prefers to live in nuclear

family rather than extended family as the typical household in the past. Then, it leads to the decreasing household size. The characteristic of preferred household size is harmonizing with the research of Thai Family (Foundation of Thai Gerontology Research and Development Institute, 2016), which indicates the decreasing size of household from averagely 5 persons per household in the past to be averagely 3 persons in the present. Afterwards, it might shape the variation of the overall family household in the society in the future.

The findings indicate the tendency of having high expense comparing to the other generations. According to the hedonism of Generation Y, they tend to spend money on the thing they prefer. Then, it affects the high expense, even though they earn quite high income since they are still young. It conforms with the research of EIC (2014), Generation Y tends to have higher expense rate comparing to previous generations. Most of them spend approximately 80% of their overall income per month, while other generations spend only 65-70%.

For the living place and transportation, as the dynamic lifestyle of Generation Y, transportation and travelling is the crucial factor playing the important role in Generation Y's everyday life. They prefer short duration travelling with approximately 30 minutes to one hour per travelling trip which conforms to the study of CBRE (2016). The transportation and mobility influence on the dwelling decision of Generation Y. Living in the city tends to be the most suitable choice for their lifestyle. The convenience in transportation location is prioritized since their daily life relies on travelling. In the aspect of residence physical, they think that size of living place depends on the household size. The bigger space provides them more comfortable feeling. Since not all spaces are occupied in each day, some of the functions can be provided by the common space in the housing development, for example co-working space, lounge, and gym. Then, they can have more sociable sense from common space usage. The desire of dwelling depending on personal choice and family is according with the theories from Beck, Rowan, and Teasdale (1974) and Rungruangphon (2013) that the requirements of the dwelling depends on the personal reasons, marriage status, household size and lifestyle.

Exercise is the indicator of health consciousness of Generation Y which involves the daily lifestyle. They tend to manage their routine with the time for exercise. Therefore, it correlates with the time arrangement from work and other lifestyle activities. Harmonizing with The Survey on Physical Activity 2015, Generation Y always spends averagely 1.34 hours per day on exercise (National Statistical Office, 2015)

For Work dimension, Generation Y prioritizes on preference and life-purpose when they consider on work decision, which is harmonizing with the study of OKMD (2016). The key concept interpreted from the interview is – Generation Y only desires their own arrangeable routine. Even though some of the existing research try to point out that Generation Y desires non-routine job leading to the trend of freelance work. This study found that although the samples work differently, they all have their own same routine everyday. Formerly, human was set work time and life time from abundant factors which drive them to be fed up with 'routine'. Nevertheless, human life is fundamentally scheduled by bio-clock. They just prefer 'my own time' or their own time arrangement. The traditional routine as people familiar with will disappear if routine is able to be determined by their own. Hence, it leads to point that Generation Y prefers independent life and decides to work as a freelance or entrepreneur, however; they have their own routine to do something repeatedly in each day.

In Play dimension, the relaxation activities of Generation Y are considered as the non-compensation activities. If it is the activity that they prefer to do – with the sense of voluntary, it is the relaxation. Relaxation and lifestyle activities fulfil their life purpose and pleasure. Time is the criteria of the relaxation activities, nevertheless; their Live-Work-Play lifestyle will allow them to balance themselves of having leisure time for their satisfied activities.

Prospecting the future of Generation Y, even the future is complicated to prospect, from the fundamental lifestyle in the present of Generation Y, the future might be in the same direction. The sense of hedonism and independence of Generation Y will be along with them for long.

Live of Generation Y, according to the personal choice of living and family plan, Generation Y tends to be more self-reliant and independent in the future. The decreasing space for the residence, housing affordable and other related factors drives people to have the personal space as necessary and tends to share more common or public space. Besides, as nowadays housing development for elderly is gradually growing to support arrival of ageing Generation X, it might be the living direction of generation Y in the future. The

smart home might increase the much accommodate to support people life in their aging stage due to the advanced development in the future.

Work in the future is to fulfil their life purpose and might not be the 'actual work'. It would rather be retirement activity in order to keep themselves active and apply their skill continually. Harmonizing with Play in the future, most time of Generation Y might not mainly arrange for work, then it allows them to have more time for relaxation activities as they prefer to avoid being lonely, for example socialization, hobbies, or voluntary activities. The mentioned tendency conforms with the concept of longevity and well-being by Dan (2008); García, Miralles, and Cleary (2018); Rath and Harter (2014); Tangkitvanich (2019) and Wiking (2017

6. Conclusion

The relevant topics summarized from the review of literatures and the in-depth interview towards the basic dimensions of Generation Y's livelihood are: (1) Family (2) Living Place (3) Mobility and Transportation (4) Healthcare (5) Career Decision (6) Working Format and Workplace (7) Relaxation Behaviour (8) Travel (9) Shopping Behaviour (10) Hobbies (11) Socialization. These are the fundamentals of Generation Y's livelihood which are influencing and involving each other, and necessary to be deliberately managed.

Then, according to the exploration of the current livelihood and the future prospect livelihood in Live-Work-Play dimensions of Generation Y from the in-depth interview, the outcome is concluded as the introductory multiple variables as follows:

Table 3 Introductory Multiple Variables Collected from In-depth Interview

Issue	No.	Multiple Variable
Live		
Family	1	Desire of having and living with family (couple and child)
	2	Desire of living alone
	3	Desire of having children
	4	Desire of living in a nuclear family
	5	Tendency of living with non-family members
Living Place	6	Desire of living in own residence
	7	Tendency of having more than one residence
	8	Suitability of living in a downtown/city
	9	Desire of the convenient transportation residence location
	10	Desire of the nearby accommodation residence location
	11	Influence of workplace on residence location
	12	Prioritizing on sufficient living space
	13	Sufficiency of 35 sq.m. residence for personal lifestyle
	14	Prioritizing on residence format
	15	Desire of common space and facilities in a housing development as a support for decreasing dwelling unit
	16	Desire of a flexible living space
	17	Desire of a smart home as an accommodation
	18	Desire of special design residence for elderly
Mobility and Transportation	19	Satisfied transportation choice : private car
	20	Desired transportation choice : public transportation
	21	Requirement of a maximum of 30 minutes one-trip travelling duration
	22	Selection of short duration transportation
	23	Selection of an appropriate cost transportation
	24	Frequent delivery service use
	25	Desire of travelling reduction from delivery service
Daily Life	26	Having the same daily routine everyday
	27	Desire of spending time in residence
	28	Preference of home-cooking and eating in
	29	Preference of food delivery

Issue	No.	Multiple Variable
Healthcare	30	Frequently arranging time for healthcare and exercise
	31	Sufficiency of 2 hours per day for healthcare and exercise
	32	Taking advantage of activities or mobility habit as exercise methods
Work		
Career	33	Desire of job choosing from life purpose
Selection and Job Satisfaction	34	Satisfaction of the current career
	35	Desire of working until 60 years old
	36	Influence of family on current work decision
	37	Influence of a residence location on work decision
	38	Tendency of career changing
Working Condition	39	Prioritizing on flexibility of workplace
	40	Prioritizing on flexibility of worktime
	41	Prioritizing on a stable career
	42	Desire of a full-time job
	43	Desire of an entrepreneur job
	44	Desire of a freelance job
Community	45	Desire of community of the work
Work Time	46	Influence of working format on daily routine
	47	Desire of work hour reduction: less than 8 hours per day
	48	Desire of work day reduction less than 5 days per week
Workplace	49	Satisfaction of remote working: home
	50	Satisfaction of remote working: co-working space or sharing space
	51	Sufficiency of 4 sq.m. work station
	52	Requiring of home work space
	53	Requiring of common work space in housing development
Compensation	54	Agreeing about extra-work for increasing income
Technology	55	Satisfaction of utilizing technology for worktime reduction
	56	Satisfaction of utilizing cognitive technology on work arrangement
	57	Satisfaction of utilizing online connection technology for remote working
Play		
Format and Time Arrangement	58	Frequently time arranging for daily non-compensation activities
	59	Sufficiency of approximately 15 hour per week for relaxation activities
	60	Frequency of doing relaxation activities in residence
Socialization	61	Spending more than 10 hours per week on socialization
	62	Preference of being outside for socialization
	63	Requiring of a meeting or socializing space in residence
	64	Agreeing about travel as a relaxation activity
Travelling	65	Influence of current working format on time arrangement for travel
	66	Require of working to have sufficient income for more frequent travel trip
Shopping	67	Agreeing about shopping at department store as a relaxation activity
	68	Spending more than twice per week on shopping at department store
	69	Preference of online shopping
Pets	70	Desire of having pets
	71	Requiring of space for pets in a dwelling unit
Gardening and Planting	72	Agreeing about planting as a relaxation activity
	73	Requiring of planting space in a dwelling unit
Hobby	74	Spending more than 10 hours per week on hobbies
	75	Agreeing about hobby as an individual activity
	76	Influence of preferred time and place for activity on changing format of relaxation
	77	Requiring of space for hobbies or activities in dwelling unit

The introductory multiple variables obtained from this paper will be developed to the observed variables for the survey questionnaire to explore the relevant factors towards current and future livelihood of Generation Y in the further quantitative research.

Since the variation of Live-Work-Play in the future seems to be arduous to prospect due to the rapid transition in this era. In the past, the change was noticeable in a century, but nowadays something occurs much more rapidly. Therefore, the upcoming things in the world need to be highly flexible in order to support all all-time change of people. Nevertheless, as mentioned, the fundamental lifestyle in the present of Generation Y, the future might be in the same direction. The sense of hedonism and independence of Generation Y will be along with them for long, this can be used as the guideline of further consideration for the living tendency of Generation Y in the future.

The outcome of this paper will be utilized as the preliminary guideline for the further research to better understand the distinct lifestyle and behaviour of the group of people in the future. Then, it will approach to the forecast of the next 30-year livelihood of the Bangkok Generation Y and lead to the long-term planning and developing living of the major group of population to be liveable with well-being in the future.

7. Acknowledgement

I would like to express my gratitude to the interview participants for giving me the time and interesting information as an initial guideline for my research from this interview.

8. References

- Beck, R. J., Rowan, R., & Teasdale, P. (1974). The Evaluation of Family Satisfaction with the Design of the Stacked Maisonette. In Environmental Design Research Association (EDRA) (Ed.), *Methods and Measures* (pp. 297-319). USA: Pennsylvania State University
- Belfatvibe. (2015). "Eventbrite and Harris Poll Find Baby Boomers Share the "Live More" Mentality with Millennials". Retrieved from <https://www.eventbrite.com/blog/press/press-releases/eventbrite-and-harris-poll-find-baby-boomers-share-the-live-more-mentality-with-millennials/>
- Bergh, J. V., & Behrer, M. (2011). *How cool brands stay hot: branding to generation*. UK: Kagan Page.
- CBRE. (2016). *Asia Pacific Millennials Framing New Regional Lifestyle Trends*. Retrieved from <https://www.cbre.co.th/th/News/Article/Asia-Pacific-Millennials-Framing-New-Regional-Lifestyle-Trends>
- CBRE. (2017). *The future of corporate real estate: How technology will shape the next decade*. Retrieved from <https://www.cbre.us/research-and-reports/asia-pacific-major-report-the-future-of-corporate-real-estate-how-technology-will-shape-the-next-decade-march-2017>
- Dan, B. (2008). *The Blue Zones: Lessons for Living Longer from the People Who've Lived the Longest*. USA: National Geographic Society.
- Department of Provincial Administration. (2016). *Statistic Information: Thai Population Categorized by Age 2016*. Retrieved from http://stat.bora.dopa.go.th/new_stat/webPage/statByAge.php
- Dickey, J., & Sullivan, J. (2007). Generational Shift in Media Habits. *MediaWeek*, 17(7), 10.
- Donnelly, A. (2008). Playing to the Digital Generation. *Marketing*, 16, 19-20.
- Economic Intelligence Center. (2014). *Insight Capturing Thai Gen Y consumers*. Bangkok: Author.
- Eisner, S. P. (2005). Managing Generation Y.S.A.M. *Advanced Management Journal*, 70(4), 4-16.
- Foundation of Thai Gerontology Research and Development Institute (TGRI). (2016). *Situation of the Thai Elderly 2015*. Bangkok: Athor.
- Frontier Group. (2012). *Transportation and the New Generation: Why Young People Are Driving Less and What It Means for Transportation Policy*. Retrieved from https://uspig.org/sites/pirg/files/reports/Transportation%20&%20the%20New%20Generation%20vUS_0.pdf
- García, H., Miralles, F., & Cleary, H. (2018). *Ikigai: The Japanese secret to a long and happy life*. Waterville, ME, USA: Thorndike Press.
- Gerritsen, A. (2008). *Millennials: The New Brand of Creatives*. Retrieved from <http://www.youtube.com/watch?gl=GB&hl=en-GB&v=SI91WDbYRbw>
- Goldman Sachs Group. (2017). *Millenials Coming of Age*. Retrieved from <https://www.goldmansachs.com/insights/archive/millennials/>

- Hakuhodo Institute of Life and Living ASEAN. (2017). *ASEAN MILLENNIALS: One size fits all? A Generation Gap in ASEAN*. Retrieved from http://hillasean.com/assets/pdf/Forum_2017_en.pdf
- Isarabhakdi, P. (2014). Attitudes of Young People About Getting Married and Having Children. In *The 10th IPSR Annual Conference 2014* (p.199-212). Nakhon Pathom: Institute for Population and Social Research: Mahidol University.
- Jivanun, S. (2013). *Changing of Consumer's Trend*. Retrieved from <http://www.manager.co.th/Home/ViewNews.aspx?NewsID=9560000022588>
- Kit, Y., & O'Donnell, J. (2009). *Gen buY: how tweens, teens, and twentysomethings are revolutionizing retail*. CA,USA: Jossey-Bass.
- Koco, L. (2006). Use Generational Marketing to Reach Boomers, Younger Clients. *National Underwriter Life & Health*, 110(20), 26-27.
- KRC Research. (2010). *Millennials & Driving; A Survey Commissioned by Zipcar*. Retrieved from <https://www.slideshare.net/colleenmccormick/millennials-survey-5861342>
- Lerspipatthananon, W. (2018). Thai Gen Y People' Travelling Behavior and Motivation Patterns. *Dusit Thani College Journal*, 12(Special Issue), 145-146.
- Mongkolsiri, S. (2005). *Power gens branding*. Bangkok: Pickanes Printing Centre.
- National Statistical Office. (2015). *The Survey on Physical Activity 2015*. Retrieved from http://service.nso.go.th/nso/nsopublish/themes/files/ExcPhysical_Activity58-1.pdf
- Panpheng, K. (2015). *Trend of Exercise and the Opportunities of Thai Fitness Business Development*. Retrieved from <https://www.scbeic.com/th/detail/product/1347>
- PricewaterhouseCoopers (PwC). (2013). *Generation Y in the Organization 2016*. Retrieved from <https://news.thaipbs.or.th/content/174974>
- Rath, T., & Harter, J. K. (2014). *Wellbeing: The five essential elements*. New York: Gallup Press.
- Rungruangphon, W. (2013). *Social Factor Influencing the Behavior of Housing Development Purchasing*. *Marketeer*. Retrieved from <http://marketeer.co.th/archives/13770>
- Šimková, E., & Holzner, R. (2014). Motivation of Tourism Participants. *Procedia-Social and Behavioral Sciences*, 159, 660 - 664.
- Sirakidakorn, S. (2011). *45 Ways of Gen Y Development*. Bangkok: Amarin Printing & Publishing.
- Stanley, T. L. (1995). Get ready for Gen Y. *Brandweek*, 36(20), 36-37.
- Tangkitvanich, S. (2019). "What will change, When Thailand becomes Ageing Society?". Retrieved from <https://www.salika.co/2019/05/13/longevity-society-thailand/>
- Tanmanasiri, N. (2016). Insight: The New Independence of Freelancer. *Creative Thailand*. Retrieved from https://creativethailand.org/admin/public/uploads/images/2559/11/file_pdf/MagazineFile_86.pdf
- Tapscott, D. (2009). Grown up digital: how the net generation is changing your world. *International Journal of Market Research*, 52(1), 139.
- Thailand Creative & Design Center. (2016). *Trend 2017 TCDC: Blurring the Line*. Bangkok: Author.
- Thailand Creative & Design Center. (2017). *Trend 2018 TCDC: IN/TO the future*. Bangkok: Author.
- The Opportunity: Knowledge Series by Office of Knowledge Management and Development (OKMD). (2016). *The Opportunity Knowledge Series: NewGen is Now*. Bangkok : Author.
- The United Nations Population Fund Thailand (UNFPA). (2016). *The State of Thailand's Population 2015 Features of Thai Families in the Era of Low Fertility and Longevity*. Bangkok: Author.
- Wiking, M. (2017). *The little book of hygge: Danish secrets to happy living*. UK: Penguin.
- William, H. C., Page, R. A., Petrosky, A. R., & Hernandez, E. H. (2009). Multi-generational marketing: Description, characteristics lifestyle, and attitudes. *Journal of Applied Business and Economics*, 11(2), 21-37.
- Zemke, R., Raines, C., & Filipczak, B. (2000). *Generations at work: Managing the clash of Veterans, Boomers, Xers, and Nexters in your workplace*. New York: Amacom.

Misuse of Prescription Drugs as Cognitive Enhancement among Iranian University Students: Evidence from an Empirical Investigation

Habeeb Abdulrauf Salihu^{1*}, Monsurat Isiaka², Kayode Abdullahi Ibrahim³, and Obasanjo Solomon Balogun⁴

^{1, 2, 3, 4} Department of Criminology and Security Studies, University of Ilorin, Ilorin, Nigeria

*Email: saliha.ha@yahoo.com

*Corresponding author

Received 30 September 2019 / Revised 16 November 2019 / Accepted in final form 18 November 2019 /
Publish Online 25 December 2019

Abstract

Medications prescribed for the treatment of neurological disorders are also used for stimulating alertness and concentration, increasing working memory and improving cognitive performance in healthy individuals. This study examines the misuse of such drugs as cognitive enhancement among Iranian university students; both primary and secondary sources of data were employed. A sample of 1,800 (graduate and undergraduate) students selected from 5 faculties in Allameh Tabataba'i University Tehran completed the questionnaires that included the demographic information and questions related to the research objectives. The findings indicated that the misuse of prescription stimulant drugs is widespread among students and that the need for success (to improved cognitive performance and boost academic grades) predicts the widespread. Thus, the study suggests that adequate public concern and sensitization that will internalize the negative effects of the drugs would be the appropriate intervention that may reduce the demand and misuse of prescription medications among the students.

Keywords: *Illicit drugs among Iranians, cognitive enhancement drugs, misuse of prescription drugs in Iran, enhancing learning capability through drugs, boosting academic grades, widespread use of psychoactive drugs among Iranian adolescents.*

1. Introduction

Islamic Republic of Iran is one of the countries around the world (most especially in the Middle-East) with a long history of illicit use of drugs (such as opium, cannabis, hookah, and diazepam and so on) (Ghiabi, 2015). Also, Iran is one of the countries recognised as having strict laws against the trafficking, possession and use of drugs (UNODC, 2008). Nonetheless, drug trafficking and addiction are among the major challenges the Iranian society is facing today. Addiction to opium and other psychoactive drugs is widespread among all social classes, ages, sexes and occupational groups in the country (Sabatelle, 2011). The country also accounts for over 70% of opium seizure globally and it is recognised as the central distribution of some psychoactive drugs to other parts of the world (Ghiabi, 2015; UNODC, 2008).

The pervasive level of drug addiction within the Iranian society has turned many adolescents into drug enthusiasts (Ahmad, Farzad, Mehdi, Mohammad, & Abbas, 2014). Although there is no official figure that discloses the prevalence of, and the rate at which adolescents (and adults) use psychoactive drugs in Iran; however, academic researchers continue to fill in the gap. For instance, a study conducted in Shiraz (one of the urban centres in Iran), reported that 30.23% of young Iranians surveyed used psychoactive drugs for recreational purpose at least once and 23.86% were addicted to psychoactive substances such as heroin, morphine, hashish, and cannabis (Ahmadi & Hasani, 2003). Moreover, the Iran Drug Control Headquarters reported that the misuse of psychoactive drugs is the bane of the young generations in the country. Adolescents are not only addicted to (psychoactive) drugs, drug dealings (smuggling and selling) have also completely become a source of income for many (Iran Drug Control Headquarters [IDCH], 2007).

Goodarzi et al. (2011) and Mirzendehtdel et al. (2010) reported that although drug addiction is endemic among Iranians; the upsurge in the level of abuse of psychoactive drugs among young Iranians (between the ages of 8 and 25 year-old) in recent years is exceptional. Researchers have identified several factors responsible for this upsurge. These factors include poor collective or societal attitude against misuse

of drugs; lack of will to eradicate the spread, rehabilitation of addicts and prosecution of traffickers on the part of the government; unemployment and economic situations; lack of adequate emotional support by relatives, and peer pressure among others (Ahmad et al., 2014; Ghiabi, 2015; Sabatelle, 2011). Mirzendehtdel et al. (2010) noted that many Iranian adolescents usually smoke, sniff, or inject psychoactive drugs to relax, relieve themselves from stress and boredom, and get their minds off sadness, gory incidents, and loneliness.

However, in recent years, there is a development that stirred the increase in the demand and motivated the widespread of the recreational use of prescription drugs among Iranian adolescents (students). Some of the prescription drugs as Ahmad et al. (2014) observed are not, mainly, used for the purposes of sedative and relieving stress, loneliness or depression, rather they are used as a motivational object (enhancer or stimulant) to improve learning (cognitive), get higher grades and have an edge over other students in the class. In addition, having revised a number of empirical research on drugs in Iran, it was observed that studies that examined this development are rare.

Majority of the previous (literature) studies have rather focused attention mainly on the prevalence of recreational use of certain types of addictive drugs (usually opium, heroin, cannabis, hookah, tobacco, and alcohol) among adolescents in high schools and universities; highlighted the problems associated and identified the likely factors that led them to the use of drugs; and provided measures for effective prevention and rehabilitation programs. However, Goreishi and Shajari (2013) observed in their study that there was an increase in the demand and misuse of prescription drugs such as Ritalin, Adderall, Modafinil, Pethidine, Morphine among Iranian adolescents but the reason or purpose for the increase was not addressed in the study. Also, Afshin, Mahasti, Ayoub, Leili, Mohammadali, and Kamyar (2011) and Ahmad et al. (2014) gauged the frequency of the use of Ritalin among Iranian medical students and assessed their knowledge of the negative effects of the drug. They observed a widespread misuse of stimulant drugs among the medical students and partially attributed the misuse to students' aspiration for success.

Furthermore, given that the previous studies in this line of research have attributed the increase in the demand for, and misuse of prescription drugs (such as cognitive enhancement medications), among healthy persons, to motivational needs such as the need to study for longer hours, to improve alertness and learning abilities in order to get higher grades and meet up with the required standards for scholarship awards and prizes at colleges and also the employers' prerequisites (Aikins, 2011; Franke et al., 2010; Soetens, Dhooze, & Hueting, 1993; Zeeuws & Soetens, 2007). This study, therefore, seeks to examine the misuse of prescription drugs among healthy Iranian adolescents (university students) as a motivational inducement to improve learning and obtaining higher grades.

2. Objectives

The objectives of this study are to: (a) investigate the widespread misuse of prescription (cognitive) stimulant drugs among the students of Allameh Tabataba'i University Tehran, Iran; (b) identify the major method of obtaining the cognitive prescription medications; and (c) examine the effectiveness of the drugs on the learning ability and ability to improve grades among users in Allameh Tabataba'i University Tehran, Iran.

3. Conceptualizing Prescription drugs and Cognitive Enhancement

Prescription drugs are pharmaceutical drugs that are legally recommended or given to individuals suffering from a particular ailment by an authorised medical practitioner (Holt & Treloar, 2008). The online Medical-Dictionary defined a prescription drug as an 'approved drug which must, by law or regulation, be dispensed only pursuant to a prescription' (Medical Dictionary, 2018). Generally, the availability and use of prescription drugs are usually regulated or controlled primarily for considerations of potential misuse and safety. However, there are different definitions of what constitutes a prescription drug. The meaning and composition depend largely on the laws or legal framework of each country (Schuster, 2006).

Like other drugs, prescription drugs are used for different reasons and purposes. The United States' National Institute on Drug Abuse (NIDA) reported that prescription drugs are the third most widely addictive category of drugs around the world. NIDA added that the three classes of prescription drugs people often use for non-medical purpose are: opioids used for the treatment of chronic pains; central nervous system (CNS) tranquillizers, such as psychoactive drugs used for the treatment of anxiety and sleep disorders, and stimulant

medications, such as Adderall, Concerta, Daytrana, Methylin and Ritalin, prescribed for people suffering from attention deficit disorder and narcolepsy (National Institute On Drug Abuse [NIDA], 2017).

Licit and illicit uses of prescription drugs have the potential to cause serious health injury, especially when used in a manner inconsistent with their instruction or when taken in a manner or dosage other than the prescribed and/or used by someone other than the patient to whom they were prescribed (Clark, Shamblen, Ringwalt, & Hanley, 2012). However, studies revealed that there are certain positive outcomes in using some prescription drugs in healthy individuals. For instance, many of the medications prescribed for the treatment of psychiatric and neurological disorders have also been found to be effective in improving cognitive performance (cognitive enhancement) in healthy persons (see the work of Sattler, Sauer, Mehlkop, & Graef, 2013 and Franke et al., 2010).

Cognitive Enhancement is one of the major reasons people, most especially students, use or get addicted to prescription drugs (Bostrom & Sandberg, 2009); that is, increasing learning self-esteem or improving the ability to compete with others in competitions (exam, interview etc.) through drugs. Cognitive is a process that includes such measures as 'acquiring information (perception), selecting (attention), representing (understanding) and retaining (memory) information, and using it to guide behaviour (reasoning and coordination of motor outputs)' (Bostrom & Sandberg, 2009). In other words, any manipulation (medical or psychological) aimed at improving or increasing the ability and capacity of any of these measures amounts to an enhancement. Thus, cognitive enhancement can simply be described as reinforcing the core capabilities of the mind through the manipulation of the internal or external information processing systems.

Medications such as Ritalin (methylphenidate) and Adderall are central nervous system stimulants mainly used for the management and treatment of a variety of disorders such as attention deficit hyperactivity disorder (ADHD) and long-term neurological disorder that affects the regulation of sleep-wake cycles (narcolepsy) (Daniali, Nahavandi, Madjd, Shahbazi, Niknazar, & Shahbazzadeh, 2013). The effects of these drugs are immense; they increase the activities and executive functions of the central nervous system in patients and even work more vigorously in healthy or normal people. They produce such effects as improving their abilities to focus attention, increase alertness, combat stress and fatigue, and efficiently improve working memory and enhance cognitive improvement in a normal healthy adult (Bostrom & Sandberg, 2009; Keane, 2008; Volkow & Swanson, 2008). Accordingly, these drugs are commonly used by some people as a cognitive enhancer to improve learning ability. A study carried out in the United States of America revealed that there is an abundant and misuse of prescription drugs among college students in most United States campuses. About 4 to 10% of the college students were reported to have used methylphenidate and Adderall as stimulant medications to enhance learning and improve alertness (Weyandt et al., 2016).

In addition, modafinil is used for the treatment of fatigue caused by disorder such as narcolepsy, sleep apnoea and shift-work sleep disorder, and often recommended for healthy people especially those who need to stay alert and awake (such as physicians and troops) for a special task; it is also effective for improving cognitive performance (Bostrom & Sandberg, 2009). A review of clinical studies on the effects of modafinil on cognitive performance carried out in 2015 revealed that there is a positive outcome that modafinil improves executive function, attention, learning, and memory. Although, some elements of decrease in certain cognitive functions are likely to set in overtime if overused (Battleday & Brem, 2015). Generally, the anticipated outcome of cognitive enhancement drugs (in patients and healthy individuals) is to manipulate cognitive performance relative to the actual state by increasing working memory performance, improving learning concentration and allowing longer or more hours of study or work (Kadison, 2005). A cognitively enhanced person is somebody who has benefited from an intervention that improves the performance of some cognitive subsystem without correcting some specific, identifiable pathology or dysfunction of that subsystem (Battleday & Brem, 2015).

Studies revealed that factors such as persistent low student grades (often below the average point), highly competitive standards or requirements set for college admission and scholarship are connected with higher rates of misuse of prescription drugs (McCabe, Knight, Teter, & Wechsler, 2005). Stimulant medications reported to be more popular among high-school and university students. They are often used by students when there is a need to stay awake through the night to study extra hours for exams or tests and/or complete academic projects (Weyandt et al., 2016). In a survey conducted on 115 college students using stimulant medications in the United States of America, the results showed that enhancing learning ability was

the primary reason why the majority of the students used stimulant medications (Rabiner et al., 2009). In another study, Kadison (2005) found that persistent students' aspiration to succeed academically, huge workloads, and the standards set by employers are the major factors that place students at an increased risk for the use of stimulants medications.

These assertions predict that the misuse of prescription (cognitive enhancement) drugs is an approach to accomplishing or achieving academic success. Although, cognitive enhancement drugs might also be used as a means of coping with stressors and increasing other subjective outcomes (Weyandt et al., 2016). Nonetheless, experts have identified the negative effects of these drugs in healthy individuals. Rabiner, Anastopoulos, Costello, Hoyle, McCabe, and Swartzweder (2009) observed that like every other psychoactive drug, misuse of prescription cognitive drugs may pose or have serious medical implications on the body systems (including brain damage). Other studies also disclosed that non-medical use of methylphenidate and other related medications may cause abdominal upset, nausea and impair the ability of certain aspects of cognition while enhancing others simultaneously. In addition, it may affect the most complex and important human organ and increases the risk of inadvertent side effects (Advokat, Guidry & Martino, 2008 ; Centers for Disease Control and Prevention, 2010; Weyandt et al., 2013)

Furthermore, the misuse of cognitive enhancement drugs by healthy individuals have been criticised by many people on the moral ground. Goodman (2010) stressed that using cognitive enhancement drugs by healthy individuals to manipulate or improve learning capability is unnatural, amounts to cheating, undermines the value of human effort and equals the unlawful use of drugs. Generally, the illicit use of drugs has negative outcomes for users. It has a chain of psychological and behavioural expressions and considered as a major brain disease that manipulates body organs (particularly the brain and muscles) and changes the structure as well as operation of the body system (Ghiabi, 2015). It can result in antisocial behaviour, psychological disorders and infectious diseases in users. In addition, it incites some social problems such as crime, stress, family and emotional instability, child abuse and other forms of violent behaviours (Ahmad et al., 2014; Sabatelle, 2011).

4. Materials and Method

This research adopts a quantitative descriptive design to identify and analyse issues relating to the research objectives. The study was purposively carried out on graduate and undergraduate students of Allameh Tabataba'i University Tehran, Iran. Allameh Tabataba'i University is an institution that specialises in humanities and social sciences in Iran. It is ranked first in the humanities and social sciences and among the top best universities in Iran (see the Iranian Ministry of Science and Education's Annual Institution Ranking). The position makes its admission a highly competitive one among candidates. The University has 12 faculties (including Graduate School) and 5 campuses (all located in Tehran). Dehkede Olympic is the Central Campus housing 5 major faculties (Law and Political Science, Communication Science, Management and Accounting, Psychology and Education, and School of Graduate Studies). This study focused on the students in all the 5 faculties in Dehkede Olympic Campus. The total number of students in each faculty is not known (no information is available or provided for the research), however, the total number of the students in the campus is around 5,500-6,000 as at the time this research is being conducted.

A letter of permission and assessment of the research contents (and instrument) was written to the Board of Ethics and Research of the University. Following the assessment, permission was granted (letter in the Persian Language) for the research to commence. In addition, the Research Ethics Committee supervised the processes of the study and reassessed the findings.

Stratified and simple random sampling was employed to draw a total of 1800 students (360 each) from the 5 faculties in the campus. Questionnaires were used as a framework for collecting data. The questionnaire was designed in Persian language, owing to the fact that Persian is the official language in Iran. It was administered to a total of 1,800 respondents with the assistance of 5 research assistants. In addition, the questionnaires were administered to students during the lunchtime break between 12:30 pm and 1:30 pm at the dining halls. The university provided lunch for the students, they gather in the dining hall for lunch. In order to ensure a reasonable level of validity and accuracy of the instrument, the questionnaire was evaluated by the Research Ethics Committee of the university. Also, a number of research experts in the university assessed the instrument. Modification was, therefore, made based on the comments and recommendations

provided by these experts. Also, a pilot study was conducted on 50 students across the faculties; this was done in order to identify and correct possible inaccuracies in the questionnaire. Moreover, in order to ensure a balance in the demographic profile of the samples a researcher was assigned to administer questionnaires to students from each faculty.

Participation in the study was voluntary. Participants' consents were sought and were informed of the objectives of the study. Confidentiality of the information and assurance of anonymity was given to them. This was ensured given that the researchers did not have access to personal details (such as name, student number, address, e-mail, phone number and academic records) of the participants. Therefore, all information collected was anonymous. The information gathered was then analysed using the Statistical Package for Social Sciences (SPSS) in generating simple percentage, frequency distributions, and correlation on some factor analyses of the responses relating to the research questions.

5. Results

Table 1 Demographic distribution of respondents

Items		Frequency	Percentage (%)
Gender	Male	918	51
	Female	882	49
Total		1,800	100
Age	18-22 years	324	18
	23-27 years	713	40
	28-32 years	521	29
	33 years-above	242	13
Total		1,800	100
Educational Level (stage)	Bachelor Degree	846	47
	Master Degree	661	36.7
	Ph.D.	293	16.3
Total		1,800	100

Source: Field Survey, 2019

Table 1 presents the demographic distribution of the respondents. The results show that 51% of the respondents were male and 49% were female. In addition, 18% of the respondents were between the age of 18 and 22; 40% between 23 and 27; 29% between 28 and 32; and 13% between 33 and above. Also, 47% of the respondents were in bachelor degree, 36.7% were in master degree and 16.3% were in Ph. D. degree. The implications of these findings are that there is a slight male predominance in this study (51% vs 49%), the age range of the majority of the participants (male and female) were between 23 and 27 year-old and the majority were in bachelor degree.

Table 2 Distribution of respondents' perception of misuse and widespread of prescription drugs among the students

Items	Strongly Agree	Agree	Strongly Disagree	Disagree	I don't know	Total
Misuse of prescription drugs as cognitive enhancement is common or widespread among the students.	428 (24%)	738 (41%)	194 (11%)	362 (20%)	78 (4%)	1800 (100%)
Students also use prescription drugs for purposes other than cognitive enhancement.	136 (8%)	306 (17%)	432 (24%)	508 (28%)	418 (23%)	1800 (100%)

Source: Field Survey, 2019

Table 2 presents the perception of respondents on the widespread misuse of prescription drugs as cognitive enhancement. It showed that 24% and 41% of the respondents strongly agree and agree respectively that the misuse of prescription drugs as cognitive enhancement is widespread and common among the students; while 11% strongly disagree and 20% disagree, 4% reported that they do not know. The findings indicated that the majority of the respondents were of the perception that the misuse of prescription drugs as cognitive enhancement is widespread among the students. In addition, 8% and 17% of the respondents strongly agree and agree respectively that students also use prescription drugs for purposes other than cognitive enhancement, 24% and 28% of the respondent strongly disagree and disagree respectively and 23% of the respondents were of the view that they do not know. The findings imply that the majority of the respondents were of the perception that students do not use prescription drugs for purposes other than cognitive enhancement.

Table 3 Distribution of respondents' response on if they have either used or are currently using prescription drugs as a cognitive enhancement

Items	Frequency	Percentage (%)
Yes	1,026	57
No	691	38.4
I don't know	83	4.6
Total	1,800	100

Note: In order to be able to get relevant information on how students obtain the drugs and how effective the drugs are, this study only analysed the responses of those that have either used or are currently using the drugs among the respondents. Therefore, the remaining results and analysis focussed on 1026 participants that ticked 'Yes' based on the results in table 3.

Source: Field Survey, 2019

Table 3 shows that 57% of the respondents reported that they have either used or are currently using prescription drugs as cognitive enhancement to improve learning capability; while 38.4% of the respondents responded in the negative, 4.6% reported that they do not know. The findings imply that majority of the respondents in this study have either used or are currently using prescription drugs as a cognitive enhancement to improve learning capability and boost academic grades.

Table 4 Distribution of respondents' responses on methods of obtaining the prescriptive medications

Items	Frequency	Percentage (%)
Presenting wrong symptoms to health professionals	17	1.7
Altering or forging prescriptions	33	3.2
Purchase from the street or unlicensed sellers	360	35.1
Purchase from friends and peers (who are patients of attention disorder)	472	46
Theft from parents or other relatives	144	14
Total	1,026	100

Source: Field Survey, 2019

Table 4 presents the responses of the respondents that have either used and/or are currently using prescription drugs based on the information in table 3. The table shows that 1.7% of the respondents were of the view that they present wrong symptoms to health professionals (such as a doctor) to get the drugs; 3.2% alter or forge prescriptions, 35.1% purchase from the street or unlicensed stores, 46% purchase from friends and peers using the drugs to treat attention disorder; while 14% often steal it from their parents or other relatives using the drugs to treat a disorder such as neurotic and other related ailments. The findings indicated that the majority of the respondents that have used or are currently using prescription drugs as cognitive enhancement get or purchase the drugs from friends and peers using the drugs to treat attention disorder.

Table 5 Distribution of respondents' responses on whether prescription drugs enhance learning capability and improve grades

Item	Strongly Agree	Agree	Neither agree nor disagree	Strongly Disagree	Disagree	Total
Prescription drugs improve learning capability (cognition).	236 (23%)	401 (39%)	215 (21%)	41 (4%)	133 (13%)	1,026 (100%)
Item	Very Good	Good	Moderate/Average	Very Bad	Bad	Total
Performance/grade evaluation when prescription drugs are used.	215 (21%)	349 (34%)	287 (28%)	31 (3%)	144 (14%)	1,026 (100%)

Source: Field Survey, 2019

Table 5 presents prescription drugs users' perception of the drugs. It can be observed that 23% and 39% of the respondents strongly agree and agree respectively that prescription drugs improve learning ability, 21% neither agree nor disagree, 4% and 13% strongly disagree and disagree respectively, while 4% reported that they do not know. The findings indicated that the majority of the respondents were of the opinions that the prescription drugs improve learning capability in users. In addition, the table shows that 21% and 34% of the respondents held the perception that prescription drugs improved their academic performance and grades, 28% held that their performance was average, while 3% and 14% were of the perception that their performance was very bad and bad respectively. The implication of this is that the majority of the respondents were of the view that prescription drugs improve their academic grades.

Table 6 Distribution of respondents (prescription drugs users) under the university scholarship and other students' benefits.

Item	First category	Second category	Third category	None	Total
Respondents (prescription drug users) on the university scholarship program.	133 (13%)	380 (37%)	431 (42%)	82 (8%)	1,026 (100%)
Respondents (prescription drug users) on the university monthly stipends benefit.	195 (19%)	267 (26%)	328 (32%)	236 (23%)	1,026 (100%)

Source: Field Survey, 2019

Table 6 presents respondents' responses to the category of scholarship and students' benefit they enjoy due to their academic performance. It can be observed that 13% of the respondents were on the first category of the university scholarship, 37% were on the second, 42% were on the third category, while 8% were not on any scholarship benefit. In addition, 19% enjoy the first category of the university monthly stipends, 26% were on the second category and 32% on the third category, while 23% are not qualified for the university stipends. The implication of these results is that the majority of the students that use prescription drugs as cognitive enhancement were on the university scholarship and stipends benefits.

Table 7 Correlation analysis between respondents' perception of prescription drugs and academic performance (improved learning and grades).

Variables	Mean	SD	Significant Level	Correlation Coefficient (r-value)	p-value
Prescription Drugs as Cognitive Enhancement	4.6441	0.70898	0.01	0.943	0.000
Improve in learning capability and Grades	4.4338	0.80402			

Source: Field Survey, 2019

Table 7 shows the correlation coefficient between respondents' opinion of prescription drugs as cognitive enhancement and improved learning capability and academic grades. The calculated r-value 0.943 > 0.5, and the p-value 0.000 < the level of significance 0.01 ($p < 0.01$). Therefore, there is a significant positive correlation between respondents' use of prescription drugs as cognitive enhancement and improved learning capability and academic grades.

6. Discussion

It is important to reiterate the objectives of this study at the beginning of this section. The study aimed at investigating the widespread misuse of prescription medications among the students of Allameh Tabataba'i University Tehran as cognitive enhancement, identify the major methods of obtaining the medications and examine how effective or efficient the prescription drugs have improved capacity for learning and grades among them.

The findings revealed that misuse of prescription drugs as cognitive enhancements to improve learning abilities and academic grades were widespread among the students of (Dehkadeh Olympic campus) Allameh Tabataba'i University; that many of the students do not use prescription drugs for purposes other than cognitive enhancement; that the primary source of obtaining cognitive enhancement prescription drugs by students was through direct purchase from friends and peers using the drugs to treat attention disorder (and from unlicensed or street sellers); and that a positive relationship between students' observed outcome in the use of cognitive enhancement prescription drugs and improved learning ability and academic grades was established.

Basically, the findings indicated that prescription drugs are commonly used by the majority of the (respondents) students purposely to improve academic capability. Given that Allameh University is one of the top universities in Iran, the academic standard set for students is very high. For instance, the minimum grade required to cross to another level of study (good-standing), say from the first-year to second-year, for bachelor students is above average (15 out of 20 points) compared with other institutions. Also, students are required to obtain a certain score (usually between 17.5 and 19 points) for them to get, upgrade and/or maintain their scholarship opportunities in the university. Besides, students with high-grades are entitled to monthly stipends and other benefits (see the University prospectus and scholarship policy). Thus, the need to meet up with these standards appears to be a motivating factor that impelled some students to use enhancement stimulants to improve their cognitive capability and perform well in exams.

Additionally, the percentage of the respondents who had either used or are currently using enhancement stimulants are enjoying the university's scholarship and other students benefit programs based on their performance and the correlation analysis indicated that enhancement stimulants were effective. Therefore, these findings corroborate the results of Advokat et al. (2008), Soetens, Casaer, and Hueting (1995), Zeeuws and Soetens (2007) where they found that prescription stimulants medications improve learning performance in healthy individuals. From the foregoing, it can, therefore, be inferred that students' observed positive outcomes of the cognitive prescription stimulants encourage the use of the medications.

7. Conclusion and recommendation

From the review of the literature, it was recognised that medications prescribed for the treatment of psychiatric and neurological disorders are also effective for stimulating alertness and concentration, increasing working memory and improving cognitive performance (cognitive enhancement) in healthy individuals. The findings of this study also indicate a positive correlation between the perceived favourable outcome of the medications and improved learning and academic grades. This study, therefore, concludes that the need for success predicts the widespread misuse of cognitive stimulants among the students of Allameh Tabataba'i University Tehran, Iran.

However, there is a need for public enlightenment and sensitization on the negative outcomes and damages these drugs could cause. Although the efforts of the authorities and stakeholders in Iran are commendable in fighting against drugs such as opium and heroin, adequate attention should also be given to the misuse of prescription drugs among healthy adolescents. Given that prescription drugs, as studies revealed, are the third most illicitly used and addictive drugs among adolescents across the globe, a special community-based-approach aimed at internalizing the potential risks of these drugs (in healthy persons) and the value of human effort should be designed and incorporated into the existing anti-drug programmes in Iran. This will be a long way in educating people and reducing the demand and misuse of the drugs. As Sattler et al. (2013) observed in their study on cognitive enhancement drugs among university students and teachers in Germany, stronger internalization of the risks and danger associated with misuse of cognitive-enhancing drugs led students to refrain from the demand and use of the medications.

In addition, efforts on the sale and distribution control of cognitive (and other addictive) prescription drugs should be intensified in the country. The authority should extend the crackdown on drug traffickers to illegal and unlicensed drug stores and sellers. Also, any patients of disorder suspected or caught practising medication diversion or selling their prescriptions to non-patients should not be allowed to buy or possess more than the daily prescribed dosage or should be mandated to visit the nearest pharmacist store to take the medication daily. In addition, a threat of punishment in term of warning to restrain the sale of the medications to any patient that transfers or sells the pills to anyone may likely make them adjust.

8. Scope and Limitations

This study investigates the use of prescription drugs as cognitive enhancement among the students of Allameh Tabataba'i University. The study is devoid of certain limitations which may question the reliability and validity of the findings. It only considered one university in Tehran (with a sample of 1,800), the capital city of Iran. In addition, the sample size may not be a representative of the population of the students in the university and there may be some variation in the perceptions of other students (even in other campuses). Also, the study did not compare the perceptions of students in the different (departments) academic field. Moreover, the perceptions of the students were self-reported, the authors do not have access to their academic grades to confirm if the drugs actually improve their academic performances. Additionally, this study did not compare the academic performance of students using enhancement stimulant with those that do not use it; and no consideration was given to a particular cognitive enhancement drug or the type widely used among these students. In the light of these issues, the findings of this study are expected to incite criticism and further research in this line of study.

9. References

- Advokat, C., Guidry, D., & Martino, L. (2008). Licit and Illicit Use of Medications for Attention-Deficit Hyperactivity Disorder in Undergraduate College Students. *Journal of American College Health*, 56(6), 601–606.
- Afshin, H., Mahasti, A., Ayoub, M., Leili M., Mohammadali, M., & Kamyar, G. (2011). Illicit Methylphenidate Use Among Iranian Medical Students: Prevalence and Knowledge. *Drug Design, Development and Therapy*, 5(1), 71–76.
- Ahmad, A. E., Farzad, J. M., Mehdi, M. A., Mohammad, M. A. A., & Abbas, A. (2014). Intention and Willingness in Understanding Ritalin Misuse Among Iranian Medical College Students: A Cross-Sectional Study. *Global Journal of Health Science*, 6(6), 43–53.

- Ahmadi, J., Hasani, M. (2003). Prevalence of Substance Use Among Iranian High School Students. *Addict Behaviour*, 28(2), 375–379.
- Aikins, R. D. (2011). Academic Performance Enhancement: A Qualitative Study of the Perceptions and Habits of Prescription Stimulant–Using College Students. *Journal of College Student Development*, 52(2), 560–576.
- Battleday, R. M., Brem, A. K. (2015). Modafinil For Cognitive Neuroenhancement in Healthy Non-Sleep-Deprived Subjects: A Systematic Review. *European Neuropsychopharmacology*, 25(11), 1865–81. <https://doi.org/10.1016/j.euroneuro.2015.07.028>
- Bostrom, N., Sandberg, A. (2009). Cognitive Enhancement: Methods, Ethics, Regulatory Challenges. *Science and Engineering Ethics*, 15(1), 311–341.
- Centers for Disease Control and Prevention. (2010). Emergency Department Visits Involving Nonmedical Use of Selected Prescription Drugs–United States, 2004–2008. *Morbidity and Mortality Weekly Report*, 59(23), 705–709.
- Clark, H. K., Shamblen, S. R., Ringwalt, C. L., & Hanley, S. (2012). Predicting High Risk Adolescents' Substance Use Over Time: The Role of Parental Monitoring. *The Journal of Primary Prevention*, 33(2–3), 67–77. <https://doi.org/10.1007/s10935-012-0266-z>
- Daniali, S., Nahavandi, A., Madjid, Z., Shahbazi, A., Niknazar, S., & Shahbazzadeh, D. (2013). Chronic Ritalin administration during adulthood increases serotonin pool in rat medial frontal cortex. *Iranian Biomedical Journal*, 17(3), 134–139. <https://doi.org/10.6091/ibj.1173.2013>
- Franke, A. G., Bonertz, C., Christmann, M., Huss, M., Fellgiebel, A., Hildt, A., & Lieb, K. (2010). Non-Medical Use of Prescription Stimulants and Illicit Use of Stimulants For Cognitive Enhancement in Pupils and Students in Germany. *Pharmacopsychiatry*, 43(2), 1–7.
- Ghiabi, M. (2015). Drugs and revolution in Iran: Islamic devotion, revolutionary zeal and republican means. *Iranian Studies*, 48(2), 139–163. <https://doi.org/10.1080/00210862.2013.830877>
- Goodarzi, F., Karrari, P., Eizadi-Mood, N., Mehrpour, O., Misagh, R., Setude, S., & Amrollahi, M. (2011). Epidemiology of Drug Abuse (chronic intoxication) and its Related Factors in a MMT Clinic in Shiraz, Southern Iran. *Iranian Journal of Toxicology*, 4(4), 377–380.
- Goodman, R. (2010). Cognitive enhancement, Cheating, and Accomplishment. *Kennedy Institute of Ethics Journal*, 20(2), 145–160.
- Goreishi, A., Shajari, Z. (2013). Substance Abuse among Students of Zanjan's Universities (Iran): A Knot of Today's Society. *Addiction and Health*, 5(2), 66–72.
- Holt, M., & Treloar, C. (2008). Pleasure and drugs. *International Journal of Drug Policy*, 19(5), 349–352. <https://doi.org/10.1016/j.drugpo.2007.12.007>
- Iran Drug Control Headquarters (IDCH). (2007). *Rapid Situational Assessment*. Tehran. Retrieved from http://dchq.ir/en/index.php?option=com_content&view=article&id=1160&Itemid=825
- Kadison, R. (2005). Getting An Edge – Use of Stimulants and Antidepressants in College. *New England Journal of Medicine*, 353(11), 1089–1091. <https://doi.org/10.1056/NEJMp058047>
- Keane, H. (2008). Pleasure and discipline in the uses of Ritalin. *International Journal of Drug Policy*, 19(5), 401–409. <https://doi.org/10.1016/j.drugpo.2007.08.002>
- McCabe, S. E., Knight, J. R., Teter, C. J., & Wechsler, H. (2005). Non-Medical Use of Prescription Stimulants Among US College Students: Prevalence and Correlates from a National Survey. *Journal of Addiction*, 99(1), 96–106.
- Medical Dictionary. (2018). *Prescription Drugs*. Retrieved January 27, 2018, from <https://medical-dictionary.thefreedictionary.com/Prescription+drugs>
- Mirzendehtdel, S., Nadji, S. A., Tabarsi, P., Baghaei, P., Javanmard, P., Sigaroodi, A., & Fekrat, M. (2010). Prevalence of HPV and HIV among female drug addicts attending a drop-in center in Tehran, Iran. *International Journal of Gynecology and Obstetrics*, 108(3), 254–255. <https://doi.org/10.1016/j.ijgo.2009.09.030>
- National Institute On Drug Abuse. (2017). *Misuse of Prescription Drugs*. Retrieved January 25, 2018, from <https://www.drugabuse.gov/publications/research-reports/misuse-prescription-drugs/summary>

- Rabiner, D. L., Anastopoulos, A. D., Costello, E. J., Hoyle, R. H., McCabe, S. E., & Swartzweder, H. S. (2009). The Misuse and Diversion of Prescribed ADHD Medications by College Students. *Disord. J. Atten.*, 13(2), 144–153.
- Sabatelle, D. R. (2011). The scourge of opiates: The illicit narcotics trade in the Islamic Republic of Iran. *Trends in Organized Crime*, 14(4), 314–331. <https://doi.org/10.1007/s12117-011-9142-0>
- Sattler, S., Sauer, C., Mehlkop, G., & Graef, F. P. (2013). The Rationale for Consuming Cognitive Enhancement Drugs in University Students and Teachers. *PLoS ONE*, 8(7), 1–10.
- Schuster, C. R. (2006). History and current perspectives on the use of drug formulations to decrease the abuse of prescription drugs. *Drug and Alcohol Dependence*, 83(1), s8–s14. <https://doi.org/10.1016/j.drugalcdep.2006.01.006>
- Soetens, E., Dhooge, R., & Hueting, J. (1993). Amphetamine Enhances Human-Memory Consolidation. *Neurosci. Lett.*, 16(1), 9–12.
- Soetens, E. S., Casaer, D. R., & Hueting, J. (1995). Effect of Amphetamine on Long-term Retention of Verbal Material. *Psychopharmacology*, 119(2), 155–162.
- UNODC. (2008). *World Drug Report 2008*. Retrieved from https://www.unodc.org/documents/wdr/WDR_2008/WDR_2008_eng_web.pdf
- Volkow, N. D., & Swanson, J. M. (2008). The Action Of Enhancers Can Lead To Addiction. *Nature*, 451(2), 520. <https://doi.org/10.1038/451520a>
- Weyandt, L. L., Marraccini, M. E., Gudmundsdottir, B. G., Zavras, B. M., Turcotte, K. D, Munro, B. A., & Amoroso, A. J. (2013). Misuse of Prescription Stimulants Among College Students: a Review of the Literature and Implications for Morphological and Cognitive Effects on Brain Functioning. *Experimental and Clinical Psychopharmacology*, 21(5), 385.
- Weyandt, L. L., Oster, D. R., Marraccini, M. E., Gudmundsdottir, B. G., Munro, B. A., Rathkey, E. S., & McCallum, A. (2016). Prescription stimulant medication misuse: Where are we and where do we go from here? *Experimental and Clinical Psychopharmacology*, 24(5), 400–414. <https://doi.org/10.1037/pha0000093>
- Zeeuws, I., & Soetens, E. (2007). Verbal Memory Performance Improved Via An Acute Administration of D-Amphetamine. *Human Psychopharmacol Clinical. Experiment*, 2(2), 279–287.

This page intentionally left blank

The Author's Voice in Selecting Equivalences in the Translation into Malay of Raja Bilah and the Mandailings in Perak: 1875-1911

Eliza Syuhada Rosli¹, Ummi Umairah Kahar² and Idris Mansor^{3*}

^{1,2,3}School of Humanities, Universiti Sains Malaysia, Malaysia
Email: ¹elie.syuhada@gmail.com, ²ummikahar94@gmail.com, ^{3*}idrismansor@usm.my

* Corresponding author

Received 31 October 2019 / Accepted in final form 13 December 2019 / Publish Online 25 December 2019

Abstract

For some scholars of translation studies like André Lefevere, translation is a manipulation of some extrinsic factors such as ideology, dominant poetics and patronage. Patronage in general refers to the power that can be exerted by individuals, groups, institutions, a social class, a political party, publishers, the media, both newspapers and magazines as well as larger television corporations which can further or hinder the reading, writing and rewriting of literature or in this instance of translation work. Whereas patronage seems like an important social and literary phenomenon widely discussed in various fields of the humanities and the social sciences, the concept of patronage which consequently touches on the issue of the power of authors is rarely discussed, if any at all in the translation of English into Malay academic writing. Hence, based on the methodology of descriptive, this article attempts to explore further on the concept of patronage which was introduced by Lefevere in the translation of a social history monograph from English into Malay which affected the equivalent of lexical choices and the choices of translation procedures used in the work of translation.

Keywords: Patronage, translation, ideology, power, Malay, Raja Bilah.

1. Introduction

Raja Bilah and the Mandailings in Perak:1875-1911 is one of many monograph series published by Malaysian Branch of the Royal Asiatic Society (MBRAS) in 2003. This well-written monograph was written by two admirable authors, Abdur- Razzaq Lubis and Khoo Salma Nasution. The story focused on Raja Bilah, who was a Mandailing high aristocrat from the Nasution clan that became a 'foreign Malay' who succeeded his well-known uncle, Raja Asal as the leader of the Mandailings. The British appointed him as a leader, a tax collector and gave him a lifetime opportunity to develop tin mines in the region of Papan, Perak, Malaysia.

This meaningful monograph gave its readers facts that are stuffed with the history of tin mining rush in the late of 1800s as well as documented Raja Bilah's life and his extended family. It consists of 39 chapters which was filled with photographs, drawings, letters that were written in Jawi (an Arabic-influenced Malay script), old maps, mining surveys, permits and receipts. Hence, this piece of writing allowed the readers to learn about the economy and social history of Malaysia particularly in Perak.

The target readers for the translated version of *Raja Bilah and the Mandailings in Perak:1875-1911* are intellectual readers as well as general public particularly the adult readers. Therefore, the translation was produced by using a documentary strategy introduced by Nord in 1997. However, due to several reasons that will further be discussed in the chapter of analysis, the concept of patronage was applied in the translated version.

2. Literature Review

Translation activities had gained many attentions and undoubtedly it is necessary in the view of spreading the information, knowledge and ideas. According to Seong and Ean (2014, p.76) translation is one of the sources that may influence the readers by its rich inputs which contains a variety of valuable knowledge as well as the ability to create a cultural interaction within the source text and the target text. Besides, Bell in Kang and Shunmugam (2014, p.194) also described that translators see themselves as a bridge between two or more cultures, and that translation is a complex process where one uses a variety of strategies to convert the source text into a target text. Translation, therefore, is crucial for the development of a country and social harmony.

By considering the target readers, the translation for such historical monograph as *Raja Bilah and the Mandailings in Perak:1875-1911*, demands the translators to choose the best translation strategy and as mentioned above, this translation used documentary strategy. According to Nord, documentary translations commonly act as a text which reveals the original type of communication between the creator and recipient of a source text. In other words, documentary translations produced a translation that retains the cultural situational aspects of its source text. As *Raja Bilah and the Mandailings in Perak:1875-1911* contains such a valuable social history, thus documentary translation can be deemed as one of the most suitable strategies as it allows the target readers to access the ideas and consequently preserve the facts included in the source text.

Translation is not merely focused on the linguistic and cultural aspect. The ideology and the concept of patronage are also considered in the production of translation. Lefevere (1992a, p.15) described patronage as "something like the powers (persons and institutions) that can further or hinder the reading, writing and rewriting of literature". Lefevere claimed that, translation is closely linked with authority, legitimacy and power which are then related to the ideology framework. According to Lefevere (1992b, p.14) the system of translated literature consists of a double control factor which are professionals within the literary systems and patronage outside of the literary system. Lefevere (1992a, p. 15) also mentioned that, the professionals include critics, reviewers, teachers and translators while the patrons include persons, group of persons and the media.

Shunyi (2016, p.107) once mentioned that ideology used to be an area of politics but now ideology had also been portrayed in the translation studies. Besides, Schaffner in Shunyi also claimed that some of the scholars even make such statement where all of translational act are ideological in which somehow it shows a close relation between ideology and translation studies. This proved that the ideology of the patron may exist in the translated work. According to Lefevere (1992b, p.14) patron's ideology can be defined as ideas or beliefs of a patron either as a person or institutional of a particular social group or class which are able to manipulate the whole process and the final product of translation in order to maintain the interests and social status of the individual or the social group or class. As an author, he or she had his own ideology which then has been conveyed in their masterpiece. Meanwhile, as a translator who is also the mediator of the message of the text, the concept of ideology and patronage in the process of translation cannot be separated. This is because, according to Shunyi (2016, p.105-116) the ideology of the patron exerts a tremendous influence on various aspect of translation such as translation procedures, translation modes, translation strategies and many others. As a result, this shows that as a translator, the ideology as well as the patronage framework should be considered too. A translator is abided by the specifications agreed between the patron and himself or herself which then results in the selection of translation strategies, procedures and even its suitable equivalent lexical in translation. Due to this issue, it proves that the process of translation is a complex and profound series of transformation that involved the author who may act as a patron, translator and readers.

This article therefore reports on how the authors play their role in selecting certain equivalences of the translation and how it affects the selection of translation procedures by the translators.

3. Methodology

This report of study was based on personal experience of the translators. The methodology used in this study was a descriptive approach. In the first stage, the source book entitled *Raja Bilah and the Mandailings in Perak:1875-1911* was read through, understood and analysed whereby a translation brief introduced by Nord in 1997 is applied. Nord (1997, p. 59-62) mentioned that applying the translation brief is important as the translator needs to compare the source text and the target text profiles which guides and helps the translator to determine some of the decisions that are to be made during the translation process. The translation brief focuses on the extralinguistic factors that consists of five factors which are the intended text functions, the addresses, the time and place of text reception, the medium and the motive.

Upon the completion of the tasks done in the first stage, the translators then proceeded to the second stage which is the translation process. In the third stage, the first editing is made. Next, a close discussion with the authors is held where the issue of patronage then arose and resulted in the final version of translation product. The last stage analysing the changes of some of linguistic equivalents that had been made as per the authors' requests.

Translation brief as well as the concept of patronage is discussed in the following chapter by focusing on a few examples and analysis of the translated version of *Raja Bilah and the Mandailings in Perak:1875-1911* which has resulted in the choices of linguistics equivalents in the translated text, '*Raja Bilah dan Suku Mandailing di Perak:1875-1911*'.

4. Data Analysis and Discussion

There are two parts of analysis in this section. The first part (Analysis I) is the analysis that focuses on the translation brief for *Raja Bilah and the Mandailings in Perak:1875-1911*. The second part (Analysis II) is the analysis which centres on a few examples that show the concept of patronage in the translated version.

4.1 Analysis I

Analysis I focuses on the translation brief for *Raja Bilah and the Mandailings in Perak:1875-1911*. Below are the translation brief.

Table 1 Translation Brief

Intended text functions	Source text: Informative Target text: Informative
Addresses	Source text: Academic readers, readers in the field of expertise and worldwide readers Target text: Intellectual readers and general public particularly the adult readers
Time and place of text reception	Source text: 2003, Malaysia Target text: 2020, Malaysia
Medium	Source text: Printed hardcover book Target text: Printed hardcover book
Motive	Source text: To introduce the readers about The Mandailings who had settled in Malaysia since a long time ago. Target text: To introduce the readers about The Mandailings who had settled in Malaysia since a long time ago.

Table 1 shows the translation brief for *Raja Bilah and the Mandailings in Perak:1875-1911*. which helped the translators in choosing the most suitable translation strategy as well as in choosing most of the translation procedures before and during the translation process. As mentioned earlier, the translation is produced by using a documentary strategy introduced by Nord in 1997. Therefore, the translated version retains the same function of the text which is informative in order to fulfil the same motive in both source and target texts.

4.2 Analysis II

It goes without saying that translation and patronage cannot be separated and consequently the concept of patronage is closely related to ideology as agreed by Lefevere (1992b: 14-18) who stated that ideology is often enforced by the patrons, the people or institutions who commission or publish translations. This will be explained further based on a few examples derived from the translated text, '*Raja Bilah dan Suku Mandailing di Perak:1875-1911*' (RBSM) with reference to the source text *Raja Bilah and the Mandailings in Perak: 1875-1911* (RBM). To begin with, the role of patron was played by the authors of the original text as made evident by the involvement of themselves in choosing and influencing translator's choice of word.

Example 1

Source Text	Target Text
The 'foreign Malays' at Kampung Trola included a large number of Mandailings who settled there after fleeing the Klang War 'four or five years' ago (RBM: 41).	Kumpulan Melayu dagang' di Kampung Trola termasuklah sekumpulan besar masyarakat Mandailing yang bermukim di sana selepas mengungsi dari Perang Klang 'empat atau lima tahun' lalu (RBSM: 53).

Example 2

Source Text	Target Text
At the conclusion of the Klang War, the Mandailings and their Sumatran allies who fled Selangor made for the hills, generally keeping to the interior of Lower Perak, away from the established Malay settlements downriver (RBM: 43).	Pada akhir Perang Klang, suku Mandailing dan sekutu mereka, orang Sumatra yang mengungsi dari Selangor, menuju ke kawasan bukit tersebut, kebiasaannya kekal berada di pedalaman Hilir Perak, jauh dari permukiman Melayu yang telah ditubuhkan di hilir sungai (RBSM: 56).

In Example 1, the translators first translated the phrase 'fleeing' with what they thought as the suitable equivalent of the word which was '*melarikan diri*' [run away] as the phrase gave off a pragmatically and semantically correct equivalent. Based on Cambridge Dictionary, 'fleeing' or the root word 'flee' can be defined as an act to escape by running away, especially because of danger or fear. Therefore, based on the definition stated in the online dictionary and with reference to the context given in the source text, the translators decided to use '*melarikan diri*' [run away] which clearly defined the word 'fled' in the target language. That was until the authors requested on the use of word '*mengungsi*' which based on the online reference provided by Pusat Rujukan Persuratan Melayu (PPRM), presented a better connotation of the word 'flee' as this particular word defined it as the act of moving from one place to another to seek safety. The same equivalent was used in Example 2 as it represents the same meaning of the phrase 'fled'. This suggested that the authors had their own ideology in which they were able to manipulate the whole process and the final product of translation in order to maintain interests and social status of the individual or the social group or class involved in their masterpiece.

Example 3

Source Text	Target Text
Therefore, they migrated together to the state of Perak (RBM: 21).	Oleh itu, mereka telah merantau bersama-sama ke negeri Perak (RBSM: 27).

Example 4

Source Text	Target Text
<i>Tarikh Raja Asal dan Keluarganya</i> describes the hardship the Mandailings went through to migrate to their 'promised land' in Kinta (RBM: 27).	<i>Tarikh Raja Asal dan Keluarganya</i> menggambarkan kesusahan yang dilalui oleh kaum Mandailing untuk merantau ke 'tanah yang dijanjikan' kepada mereka di Kinta (RBSM: 35).

Example 5

Source Text	Target Text
The Padri War and Raja Bilah's Migration to the Peninsula (RBM: 15).	Perang Padri dan Perantauan Raja Bilah ke Semenanjung (RBSM: 19).

Other than that, the concept of patronage was indicated in the translation of the word 'migrate' in which it was primarily translated as '*berhijrah*' [migrate] by the translators who first believed the word chosen was an adequate equivalent for the word 'migrate'. The word 'migrated' in the context given in Example 3 refers to the act of moving from one place to another or travelling in large numbers to a new place to live temporarily (Cambridge Dictionary). Correspondingly, the translators found an equivalent word in the target language which accommodated the idea of the word 'migrate' that is '*berhijrah*' [migrate]. However, the authors had a different idea while producing this work. Accordingly, the authors asked the translators to use a different word that is '*merantau*' instead of '*berhijrah*' as the equivalent for the word 'migrate'. Even though the word '*merantau*' does not accurately portray the idea that comes with the word 'migrate' in a literal sense as the word '*merantau*' is defined as the act of moving from one place to another to find a better life or travelling. The translators believed that the authors had their own ideology of they wanted to convey through the use of the word '*merantau*' which was that the Mandailings were not merely moving from their place to another country but they actually moved for the sake of seeking a better life. The same equivalent was used in Example 4 as well as Example 5 which was actually the title of the related chapter.

Example 6

Source Text	Target Text
Raja Bilah took the police magistrate's instructions very seriously, to the extent of moving from the Mandailing settlement at Pangkalan Kacha to the mining town at Papan, which had mainly Chinese population (RBM: 32).	Raja Bilah memandang arahan majistret polis itu dengan sangat serius sehingga beliau berpindah dari permukiman Mandailing di Pangkalan Kacha ke pekan perlombongan di Papan yang kebanyakannya dihuni dengan populasi Cina (RBSM: 42).

Example 7

Source Text	Target Text
Raja Asal asked Birch for monetary assistance and sought permission 'to take his men and settle at Slim where he is sure he could soon make a first rat profit by tin and good gardens etc' (RBM: 23).	Raja Asal telah meminta bantuan kewangan daripada Birch dan memohon kebenaran 'untuk membawa pengikut-pengikutnya dan bermukim di Slim, sebuah tempat yang diyakini beliau dapat menghasilkan keuntungan yang sangat banyak tidak lama lagi, hasil daripada timah dan perkebunan yang baik dan sebagainya' (RBSM: 29).

On the other hand, the influence of patronage was also evident in the translation of the word 'settlement' which was at first translated as '*petempatan*'. Based on the translators' point of view, the word '*petempatan*' was an accurate equivalent to redefine the word 'settlement' in the target language. Based on Example 6, 'settlement' can be defined as a place where people come to live or the process of settling down at such a place (Cambridge Dictionary) and this was perfectly conveyed through the use of word '*petempatan*' which portrayed the same semantic meaning. Nevertheless, the authors had their own stand on the choice of word for this which was probably influenced by the use of cognate language. The reason for his firm choice of word is because, the word '*permukiman*' which was the preferred equivalent for the word 'settlement' is actually mainly used in Indonesian language and is probably related to the origin of the authors and also the main characters of the book, the Mandailings. This was also applied on Example 7 where the translators first translated the word 'settle' into '*menetap*' which conveyed the same semantic meaning but upon request, it was changed to the word '*bermukim*' which also portrayed the same semantic meaning yet it carried along the identity of the authors and the main characters. Once again, the authors were able to manipulate the whole process and the end product so they could maintain the interest and social status of the cognate language and social group.

Example 8

Source Text	Target Text
Imam Prang Ja Barumun, a ' Maker of Kinta' (RBM: 130).	Imam Prang Ja Barumun, ' Pendiri Kinta' (RBSM: 168).

Example 9

Source Text	Target Text
The Imam Prang's reputation was built upon his myriad accomplishments as a ' maker of Kinta' (RBM: 133).	Reputasi Imam Prang dibina atas pencapaiannya yang luar biasa sebagai ' pendiri Kinta' (RBSM: 172).

The influence of patronage was also shown in translating the word 'maker' that was used in a title of a chapter and also in the content written in this book. Based on Example 8 and 9, the word 'maker' refers to people that make something (*Cambridge Advanced Learner's Dictionary*, 2013). and there was no absolute equivalent for this word in the target language. Therefore, the translators primarily translated this word into '*pembentuk*' in the target language as they perceived this word as an adequate equivalent to deliver the idea of the word 'maker' in which '*pembentuk*' refers to people who form something (PRPM). Yet the authors had a different idea in what he originally wanted to convey as he suggested the translators to use the word '*pendiri*' instead which refers to a person who build or founded something (PRPM). The translators believed that the authors wanted to convey an ideology beyond the literal meaning of the word 'maker' as the persona, Imam Prang did not only found Kinta but he also supported the growth, development and evolution of Kinta. This once again has proven the role of an author as a patron in influencing the choice of linguistic equivalent in the target text.

Example 10

Source Text	Target Text
All the money for the payment of summons which is held by the government must be surrendered into the treasury , likewise with the fees, they should be given to the process-servers (RBM: 202).	Ehwal segala duit harga saman yang dapat pada government itu harus diserahkan ke dalam treasury demikian juga fasal upahan yang harus dibayar orang yang hantar saman itu jualah (RBSM: 258).

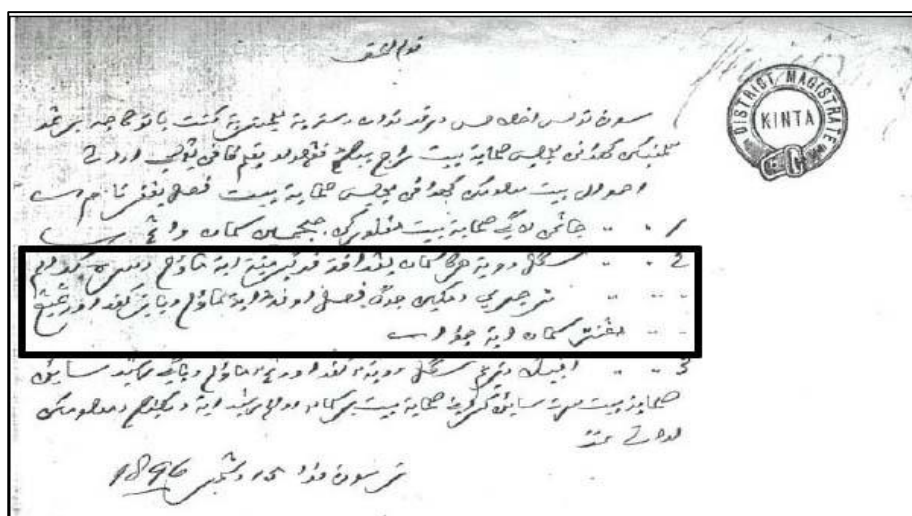


Figure 1 Example of English words were written in Jawi

Last but not least, the concept of patronage can also be seen in the translation of old documents including letters and receipts which were originally written in Jawi for example in Figure 1, even though the translators have the ability to translate those old documents with accommodation to the current language convention. The authors from the beginning had requested the translators to only work on the transliteration of those old documents. In the transliteration produced, there were a few English words derived from the old documents which were originally written in Jawi such as 'treasury' and 'government' as shown in Example 10. This indicated that mixed languages were used in writing back then and it was probably a part of the old writing style. Thus, the authors most likely wanted to introduce the ancient style of writing to the newer generations and at the same time maintain the interest of old material. This also supported the statement suggested by Shunyi (2016, p.105-116) who agreed that the ideology of the patron exerts a tremendous influence on various aspect of translation including the translation procedures, translation modes, translation strategies and many others.

Based on the discussion above, it proves that the issue of patronage undoubtedly plays a pivotal role in a translated text of *Raja Bilah And The Mandailings In Perak: 1875-1911*. The role of patron was played by the authors themselves as it was evident that the authors exerted their power to influence the choice of equivalent lexical and also the translation procedure. Therefore, it could be concluded that the concept of patronage in this translation work particularly was influenced by a few factors including the authors' intention on spreading his own ideology, his own ways to convey his idea through the choice of word and his desire to preserve their national identity. Through Example 1 and Example 2, the influence of the authors on the choice of the equivalent lexical in the target language managed to portray the authors' ideology which showed that The Mandailings were not running away instead they were actually looking for a place to seek safety. Therefore the word 'flee' was translated into an equivalent lexical that has a better and positive connotation. Besides, Example 3, Example 4 and Example 5 proved that the authors had his own ways to convey his idea beyond the literal sense of words. Hence, the word 'migrate' was translated by using the chosen lexical which portrayed the same idea even though it was not translated literally. The same goes to Example 8 and Example 9 where the word 'maker' was translated into another equivalent lexical that gave the same meaning and impact to the targeted readers.

In addition, the word 'settlement' in Example 6 and Example 7, displayed the authors' objectives to preserve their national identity through the use of cognate language which indeed the translators had to abide and choose an equivalent that portrays the mix of Indonesian and Malay language in the translated text. Lastly, in Example 10, it showed that the issue of patronage was not just directed on the choice of lexical equivalent, but also the procedure and process of the translation. In this translated text, all of the documents that were originally written in Jawi were translated by using transliteration procedure upon the request of the original authors in which to retain the unfamiliar and the conventional style of an ancient Jawi writing. Therefore the authors' need and objectives to introduce such style of writing to the readers of the source text was also conveyed to the target readers for the translated text as the patronage framework was applied and once again has suggested on how the authors have the power in influencing the process of translating according to the end product.

5. Conclusion

Zauberga in Novin and Salmani (2017, p.1444) once mentioned that ideology and patronage framework may result in linguistic manipulation in the translated text. Consequently, this supported Lefevere who claimed that there is an interwoven relationship between patronage and ideology. Thus, based on the analysis supported by few examples derived from the Malay translation of *Raja Bilah and the Mandailings in Perak: 1875-1911* entitled '*Raja Bilah dan Suku Mandailing di Perak:1875-1911*', it proved that even though the concept of patronage in translation from English into Malay is not widely discussed yet, it does not change the fact that the practice of patronage through patrons can affect various aspect of translation including the translation procedures, translation modes, translation strategies and finally, it will also surely influence the translation product as the end product comes with the ideology brought by the patrons. Either way, it shows how the author's ideologies and certain aims can be delivered through a translation work conveyed by a translator as a mediator to the targeted readers.

6. Reference

- Cambridge Advanced Learner's Dictionary*. (2013). Retrieved July 7, 2018, from <https://dictionary.cambridge.org/dictionary/english/fled>
- Kang, M.S., & Shunmugam, K. (2014). The Translation Profession in Malaysia: The Translator's Status and Self-Perception. *GEMA Online® Journal of Language Studies*, 14(3), 191-205.
- Lefevere, A. (1992a). *Translation/History/Culture: A Sourcebook*. London: Routledge.
- Lefevere, A. (1992b). *Translation, Rewriting, and the Manipulation of Literary Fame*. London: Routledge.
- Lubis, A., & Nasution, K.S.(2003). *Raja Bilah and the Mandailings in Perak: 1875-1911*. N.P.: Malaysian Branch of the Royal Asiatic Society (MBRAS).
- Nord, C. (1997). *Translating as a Purposeful Activity*. Manchester: St. Jeremo.
- Novin, M. H., & Salmani, B. (2017). Patronage Network and Ideological Manipulations in Translation of Literary Texts: A Case Study of George Orwell's "1984" in Persian Translation in the Period 1980 to 2015. *World Academy of Science, Engineering and Technology International Journal of Cognitive and Language Sciences*, 11(6), 1439-1444.
- Pusat Rujukan Persuratan Melayu (PRPM)*. (2012). Retrieved July 7, 2018, from <http://prpm.dbp.gov.my/cari1?keyword=mengungsi>
- Seong, G. S., & Ean, B. P. (2014). Analisis Strategi Penterjemahan Chengyu ke dalam Bahasa Melayu. *GEMA Online® Journal of Language Studies*, 14(2), 75-91.
- Shunyi, Chen. (2016). Proposing a Theoretical Framework of Patron's Ideology in Translation. *International Journal of Humanities and Social Sciences*, 6(1), 105-116.

The Performance of the Prevention and Suppression of Narcotics by Border Patrol Police: A Case Study of Border Patrol Police Company 327, Chiang Rai Province

Ananyawat Ratanawichai¹ and Sasiphattra Siriwato^{2*}

¹Faculty of Criminology and Justice Administration, Rangsit University, Pathum Thani, 12000 Thailand

^{2*}Institute of Diplomacy and International Relations, Rangsit University, Pathum Thani, 12000 Thailand
Email: ¹what_where40@hotmail.com, ^{2*}sasiphattra.s@rsu.ac.th

*Corresponding author

Received 23 December 2019 / Accepted in final form 6 January 2020 / Publish Online 10 January 2020

Abstract

This research has two objectives: the first objective is a needs analysis of the prevention and suppression of Border Patrol Police against narcotics. The second objective is recommending solutions for increasing the efficiency of the prevention and suppression of the drug trafficking network by Border Patrol Police Company 327 in Chiang Rai Province. Both qualitative and quantitative methods were used to gather information. Approximately five participants were purposively selected and interviewed, and 169 volunteer samples were surveyed. This research found that the most significant problems and obstacles to implementing prevention and suppression by Border Patrol Police against narcotics are as follows: suppressing and arresting the perpetrators; investigating the case and prosecuting; searching for news and intelligence; managing and administrating investigations; coordination with other organizations and agencies; control and surveillance; and public relations.

In addition, guidelines and recommendations to increase efficiency of strategies for the suppression and prevention of drug trafficking networks are to increase the efficiency concerning news and intelligence operations, such as asking for cooperation from interviewees while providing them with protection and risk prevention as well as giving rewards to those interviewees with experience. These practices must include the following: arresting the perpetrators, developing new techniques and forms to arrest the perpetrators, coordinating with any involved agencies in order to build good relations, and embrace both government and private sectors in addition to those individuals who are responsible for exchanging information in order to efficiently prevent and suppress drug trafficking networks.

Keywords: *prevention and suppression of narcotics, drug addiction, Border Patrol Police, drug networks, narcotics trafficking*

1. Background and Significance of Problems

All social sectors in Thailand widely accept drug problems as a critical problem at the national level. It has also become an influential agenda of the nation, which urgently needs to be addressed and analyzed from causes to the consequences because every social sector is being adversely affected by the growing spread of narcotics. Even though there have been strict measures of suppression and prevention against drug traffickers and drug addicts, the number of drug dealers, drug addicts, and cases of drug trafficking increase every year (Paterapulvadon, Jereanwong, & Threetot, 2017). In 2017, it was expected that these numbers would increase and affect 271 million or 5.5% of the total world population, aged between 15 and 64 years old, which is similar to the numbers from the previous year, 2016. In addition, it is anticipated that the number of drug dealers will increase by 30% from the year 2009, while several world populations will increase by around 10%. Additionally, it was reported that the uses of drugs extracted from opium are prevalent in the regions of North America, Africa, Asia, and Europe when compared to the year 2009. Meanwhile, the uses of marijuana are increasingly spreading in North America, South America, and Asia as well (BBC News, 2019). These reports clearly indicate the critical problem of drug trafficking and use increasing and spreading throughout the world. According to these unfortunate statistics, it is anticipated that these will pose problems for the implementation of suppression against narcotics unless it is more thoroughly studied (Kampunthong, 2018).

The Drug Safety Pracharath Ruamjai Plan 2018 is composed of 4 plans: drug suppression plan, drug treatment plan, drug protection plan, and completes the administrative plan. These plans aim to reduce drug problems in three parts--upstream, midstream, and downstream--by concluding the overall results in 2018 as follows:

1) Internationally aggressive operation plan: the overall results of the Mekong River safety zone covering six countries (total period three years) showed 1,836 of arrest cases with 3,376 suspects possessing evidence such as amphetamine, marijuana, ice, heroin, opium, ecstasy, chemicals, and substrate. Accordingly, the performance of the cooperative framework in controlling narcotic spread at global and regional levels in Asia resulted in good cooperation between associated countries, which are bilaterally: Thai and Laos, Thai and Singapore, Thai and Myanmar, Thai and Malaysia, Thai and China, and Thai and Cambodia (Chiangmai News, 2018).

2) Suppression plans against drug trafficking networks: suppression and law enforcement lead to 298,975 arrest cases with 322,294 suspects covering 75,862 cases with five substantial charges against 89,928 suspects possessing narcotic evidence such as amphetamine, marijuana, and ice under the allegation of conspiracy, support, and assistance (Chiangmai News, 2018).

3) Prevention and drug treatment plans in the village and community regarding drug protection for children and minors in academic institutions and a group of primary children must emphasize the building of immunity and the development of cognitive skills by the conveyance of Brain Executive Functions (BEF). In addition, those plans should be targeted at workforces in the business sector as well as ordinary people in the villages/communities as security communities with drug safety suppression in accordance with Drug Safety Pracharath Ruamjai Plan 2018. This plan also includes drug treatment and rehabilitation, with 184,907 drug addicts who receive treatment covering three systems. The government operation to suppress and solve drug problems from 2015 to 2018 resulted in consistently alleviating the drug problems in Thailand (Chiang Mai News, 2018). However, the problems of the implementation of prevention and suppression against drug trafficking networks are periodically manifested.

However, a police study of drug suppression found that there are many problems with this implementation. For instance, a case study by Paterapulvadon, Jereanwong, and Threetot (2017) studying the problem of implementation of prevention and suppression against drugs by police officers working in police stations, Petchabun Province, found that the overall problem of implementation of prevention and suppression against drugs by police officers was at a high level. The problem of suppression and arrest showed the maximum level, followed by public relations, investigating the cases, and finding the intelligence and information. The overall problem of administration of prevention and suppression against drugs was at a high level. The aspect of administration appeared at the maximum level, followed by materials and tools of the workforce and expenditures. Administrative resource factors were workforce, expenditures, materials, tools, and administration leading to the implementation of prevention and suppression against drugs at a significant level. In addition, a study conducted by Thanornsreedech (2016) regarding the administration of the prevention of drugs by city municipalities according to the concept of sustainable administration revealed that the problems of administration were the city municipal operating in drug prevention without using extensive networks.

Border Patrol Police is another essential agency responsible for prevention and suppression against drugs, in cooperation with other agencies, under the Royal Thai Police Headquarters. This agency acts as a police operation, as reinforcement replacing military force maintaining peace along the border areas in accord with the Geneva Treaty between Thailand and France. It determines military force within the radius of 25 kilometers from border areas. The aim of establishing Border Patrol Police at the initial phase is to protect Communists from invading the country. However, at present, the Border Patrol Police are responsible for suppressing drugs, especially amphetamine, entering into Thailand, especially the Border Patrol Police Company 327, Chiang Rai Province, who are accountable for providing support in blocking drug trafficking with consistency because of the heavy inundation of narcotics from neighboring countries. It can be noticed by the confiscation of evidence by police, such as amphetamine in the central area before transporting to the southern region (Manager Online, 2019). Consequently, these lead to searching and investigating the problem and obstacles to the implementation of prevention and suppression against drug networks to find the guidelines in enhancing work efficiency in the future.

2. Research Objectives

- 1) To study the problems and obstacles to the implementation of prevention and suppression against drug networks by the Border Patrol Police Company 327, Chiang Rai Province
- 2) To propose guidelines and recommendations for the efficient implementation of strategies for the prevention and suppression of narcotics trafficking

3. Research Methodology

Both qualitative and quantitative methods were used to gather data. For the qualitative method, approximately five purposively selected participants were interviewed. These five participants are Border Patrol Police from the Border Patrol Police Company 327, Chiang Rai Province. Table 1 provides a list of five participants who were interviewed. The selected participants must have at least three years of work experience. The participants provided detailed information to help answer the research questions.

Table 1 The interviewees to in-depth interviews

Border Patrol Police Officers	Number (individual)
Inspector of Border Patrol Police Company 327	1
Sub – Inspector 3271	1
Sub – Inspector 3272	1
Sub – Inspector 3273	1
Sub – Inspector 3274	1
Total	5

For the quantitative method, a voluntary sampling was used, and approximately 169 police officers in the Border Patrol Police Company 327 were surveyed. These 169 police officers were the total number of Border Patrol Police Company 327 as of October 2019.

4. Research Results

4.1 Problems and obstacles to implementing prevention and suppression against drug trafficking networks by the Border Patrol Police from the Border Patrol Police Company 327, Chiang Rai Province

For the in-depth interview, 5 participants were interviewed to gather more detailed and specific information. The following are the responses of the participants:

1) The first, third, and fourth interviewees are experienced officers aged between 34 and 53 years old with positions ranging from Police Sargent Major to Police Sub-Lieutenant and have education levels from below bachelor's degree and single, ascending to the doctorate level, married and having a monthly salary of 23,000 to 35,000 baht; they also have 9 to 30 years of work experience. Although these police officers have extensive work experience, they find few chances for promotions to become Deputy Commissioner General, which requires a high level of decision-making capacity to be in the command line of the police department.

2) The second and fifth interviewees are police officers who have less work experience when compared to the other participants, 3 to 5 years, graduated from the Royal Police Cadet Academy, are aged between 24 and 27 years old, have positions from Police Lieutenant to Police Captain with a single status, and salaries between 20,000 and 25,000 baht. Although they have less work experience, they are an excellent chance to be promoted to Commissioner-General as they graduated from the Royal Police Cadet Academy. This group of participants tends to use theoretical knowledge rather than work experience when compared to the first group. Therefore, to achieve the best efficiency for drug prevention and suppression, these two groups of participants must work together and help each other.

From in-depth interviews, there are 12 problems and obstacles to implement drug prevention and suppression which are (1) the problem of suppression and arresting (capturing drug perpetrators); (2) the

problem of finding the intelligence and investigating the cases; (3) the problem of administration; (4) the problem of equipment; (5) the problem of personnel; (6) the problem of expenditures; (7) danger for their life; (8) the problem of coordination between agencies; (9) the problem of surveillance; (10) the problem of drug treatment; (11) the problem of poor and uninvolved, or disengaged communities; and (12) the problem of public relations. However, the top three significant problems and obstacles to implementing drug prevention and suppression by Border Patrol Police are as follows: gathering intelligence related to drugs, suppression and arresting (drug perpetrators), and cooperation with other agencies.

The first problem is gathering information related to drug trafficking. Regarding the work of investigating the case and finding the intelligence (informant operation), most informants were reluctant to cooperate with the officer because they fear retaliation from the drug dealers and require excessively expensive rewards, together with the lack of enough funding for investigating and finding the intelligence, such as the cost of petrol, food, and accommodation. Too frequently, the police officer had to use personal funds to support their working operation, which is consistent with the first interviewee, who stated:

Major problems and obstacles to the implementation of drug prevention and suppression are about investigating the cases and finding the news because most news lines were reluctant to giving cooperation with the officer because they fear the dangers and require too expensive rewards.

As the second interviewee similarly stated:

The main problem and obstacle to the implement drug prevention and suppression is about investigation cases and finding the news, together with the lack of enough budgets to access more information, such as the cost of petrol, food, and accommodation. More often, the police officer had to spend personal funds to support their working operation.

Suppressing and arresting the drug perpetrators is the second problem. It is difficult to find evidence to charge the primary suspects in specific areas because most big drug dealers do not live in Thailand. Therefore, most of the arrested drug perpetrators are a small group, and mostly involved in drug delivery. Therefore, the police find it very difficult to get access to primary drug operators. In addition, currently, the number of drug traffickers importing into Thailand are increasing. Thailand is becoming the place for drug storage with numerous conveyor paths. Moreover, modern communication methods in Thailand have become so congested that it is difficult for police checkpoints to stop and arrest drug traffickers who use sophisticated methods such as: using new technology for money transfer instead of cash, and, with the easy transfer methods and new modifications of drug payments, such as using bitcoin for payment as well as money laundering of drug money.

Additionally, in the present, most drug traffickers living in the southern region prefer to use nature trails for delivering narcotics with increasing rates aside from utilizing an assortment of drug-delivery forms, making it impossible for a police officer to arrest the drug perpetrators which makes it challenging to eradicate drug trafficking in Thailand. As the first interviewee explained:

The problem and obstacle to the implementation of drug prevention and suppression is the difficulty in arresting the influential persons in many areas as well as to find strong evidence because most of them are not living in Thailand; however, the police instead are always capturing minor drug traffickers.

As the third interviewee similarly stated:

The problem and obstacle to the implement drug prevention and suppression is that the number of drug dealers is being multiplied, leading the narcotics flowing into the country as the place for drug storage with many delivery paths, while

communication in Thailand is so heavily congested that it is difficult for the police to set up the checkpoint to capture those drug perpetrators. Moreover, most of them use modern methods for drug trades, such as using bitcoin instead of cash in the past.

Similarly, the fourth interviewee stated:

I think the main problem and obstacle to implementing drug prevention and suppression is arresting the drug traffickers because, nowadays, most drug dealers live in the border areas, which allows them easier access through natural paths for delivering drugs as well as access to more advanced conveyance methods, thus, making it impossible for police officers to arrest them; these are the most serious problems as seen today.

The third problem is cooperation with other agencies. It is quite difficult to establish relations with other organizations because the officers need to use news and information supported by the news lines. However, they often share insufficient information; so, while working, they cannot share the same information equally. This makes operations inconsistent. This finding is similar with the first interviewee, who stated:

The problem and obstacle to the implement drug prevention and suppression is the lack of complete cooperation; especially when the officers are working with other agencies, this causes some problem because of being unable to share information 100%, thus leading to unequal and dissimilar information followed by a discontinuity of operation.

4.2 Guidelines and recommendations to enhance the efficiency of the implementation of drug prevention and suppression of the Border Patrol Police can be concluded as follows:

The five interviewed participants suggest the following recommendations:

- 1) It is essential to eliminate the source of narcotics together with strictly controlling and aggressively penalizing both drug traffickers and drug addicts, which is in accord with the first interviewee, who stated:

I agree that they should eradicate the narcotic sources besides imposing aggressive penalties on those drug dealers and drug addicts to make them afraid of legal punishment.

- 2) There must be the integration of policy working jointly with the neighboring countries to prevent and reduce the amount of narcotics flowing into Thailand, which is in line with the first interviewee, who stated:

Integration policy should be launched by jointly working with those neighboring countries; this can help reduce the influx of drugs into Thailand.

- 3) It is necessary to provide education about narcotics to the minority populations as well as the majority of each community so that they have the knowledge they need to help them choose to avoid drugs. As the second interviewee stated:

The minority should be provided enough knowledge equal to people in the larger communities; this can lead to more lawful behavior, law abiding citizens and greater respect for the law.

- 4) It is also vital to add and provide more equipment for the investigations, such as drones, bugs, GPS, guns, armed forces, and more funding to be consistent with the increasing workload. As the third interviewee explained:

They should increase the funding and equipment for investigation tools, such as drones, bugs, GPS, firearms, armed force, and budgets to accommodate increasing work of the police.

- 5) It is crucial to launch a policy for supporting dealers by making the trade of drugs legal and by taxing the sale of drugs by the government, which is consistent with the fourth interviewee who explained:

There should be a policy allowing a legal drug trade, but with limitations to the quantity of narcotics traded. They also should pay taxes to the government in order to provide better control and supervision of lawful narcotics trading.

- 6) It is imperative to add financial support to the budgets of the Border Police so that they can implement drug suppression strategies effectively and consistent with their duties and responsibilities. As the fifth interviewee noted:

The Border police should receive more financial support to help their implementation of drug suppression consistent with their duties.

4.3 Recommendations to implement the prevention and suppression of drug trafficking networks by the Border Patrol Police from the Border Patrol Police Company 327, Chiang Rai Province (Quantitative Research)

Table 2 The guidelines and recommendations to implement prevention and suppression against drug trafficking networks with more efficiency

Order	The guideline and recommendation to implementation of prevention and suppression against drug trafficking networks with more efficiency	$\bar{X}$	S.D.	Translation
1.	It is necessary to increase the efficiency of “the campaign for drug prevention”	3.10	1.190	average
2.	It is essential to increase the efficiency of “news operation”	3.59	1.031	high
3.	It is vital to increase the efficiency of “arresting drug perpetrators”	3.52	1.023	average
4.	It is crucial to boost the efficiency of “training armed forces and strategies”	3.34	1.220	average
5.	It is paramount to boost the efficiency of “cooperation with all involved agencies”	3.44	1.106	average
Total		3.39	0.0496	average

Table 2 shows guidelines and recommendations to implement prevention and suppression against drug trafficking networks with more efficiency. It was found that the overview score is at a moderate level ($\bar{X} = 3.39$, S.D. = 0.0496). The efficiency of intelligence operation should be improved at a high level ($\bar{X} = 3.59$, S.D. = 1.031), followed by the efficiency of arresting the perpetrators should be enhanced at an average level ($\bar{X} = 3.52$, S.D. = 1.023). The efficiency of “cooperation with any related agencies” should be bettered at an average level ($\bar{X} = 3.44$, S.D. = 1.106).

The guidelines and recommendations to implement strategies of prevention and suppression against drug trafficking networks with more efficiency indicate that the overall score is at an average level. Table 2 also reveals that the efficiency of news operations is the highest priority to be improved, followed by the efficiency of arresting the perpetrators and the efficiency of “cooperation with any related agencies”.

5. Discussion

5.1 The problem and obstacle to the implementation of drug prevention and suppression by Border Patrol Police from Border Patrol Police Company 327, Chiang Rai Province

The problems and obstacles to the implementation of drug prevention and suppression by Border Patrol Police is the lack of more involvement with case investigation, the search for intelligence, administrative management, materials and tools, armed forces, expenditures, risks, cooperation, control and surveillance, treatment of drug addicts, reinforcement in the community, and public relations. This finding is in line with research by Paterapulvadon et al. (2017), who found that the problem and obstacle to the implementation of drug prevention and suppression by police officers from Petchabun Police Station, Petchabun Province appeared to be the overall image was at the high level. When considering each aspect with descending orders, it was turned out that the aspect of arrest and suppression was at the highest level, followed by public relations, case investigation before ending with the search of news. This research was also agreeable with the study by Thanornsreedech (2016) reporting that the significant problem concerning administrative management was the implementation of drug prevention without using extensive operating networks. This study is consistent with research by Aek Patthara Lao Mee Pon (2015), indicating that the number of officers responsible for drug suppression was insufficient and meager because of high risks and the lack of operators and tools contributing to drug suppression in this responsibility. Furthermore, there were obstructions to the operation due to the delay of taking effect of the policy on drug suppression in hierarchical orders; moreover, each department has its commanding line, thus leading to disunity in the solutions to drug problems. There were also the problems of cooperation with other departments depending on unofficial collaboration, together with budget allocation to support drug suppression dispersed throughout many agencies. Additional problems also include budget scramble, the incompleteness of work operation, and limitation and delay in allocating budgets. Meanwhile, the obstacles to the implementation of police officers include weak enforcement of law and feeble punishment on those repetitive drug perpetrators making the police officer unable to use full force in searching for narcotics, insufficient work performance, inadequate tools and equipment, incomplete physical condition of the officers, and lack of officer training. This finding is in accordance with the research by Touyeun (2015) finding that the problem of cooperation and solution to drug problem by the community leader in Uttaradit Province has four aspects, which are the problem of planning, the problem of control and surveillance, the problem of drug treatment on the addicts, and the most severe problem of community reinforcement; the overall image is at average level. The above findings agree with a study by Suwanit (2015) who found that the problems in operation of the Drug Prevention and Suppression Center in Pho Thong District, Ang Thong Province, can be categorized into four different aspects, each with diverse problems: the structure and roles of the operators, cooperation system, mobilization of Drug Prevention and Suppression Center, and the resources used for administering personnel. This finding is agreeable with the study by one interviewee saying:

The problem and obstacle to the implementation of drug prevention and suppression against drug trafficking networks involve with the difficulty in arresting and suppression, case investigation, accessing for more information, armed forces, limited budgets, high risks, incomplete cooperation, control and surveillance, treatment on drug addicts, and community reinforcement.

These findings are also consistent with one interviewee who described the problems and obstacles to the implementation of drug prevention and suppression against drug trafficking networks by Border Patrol Police in the following:

Most problems and obstacle to the implementation of drug prevention and suppression against drug trafficking networks are the problems of suppressing the increasing number of drug dealers together with rising inundation of narcotics into Thailand as the place for drug storage with many delivery paths as well as heavily congested communication, making it difficult to set up police checkpoints for arresting those drug traffickers who use much more complex methods than in the past, such as using bitcoin for trading drugs instead of cash as well as utilizing easier money transfer methods for drug trades.

5.2 The guidelines and recommendations for the police to implement drug prevention and suppression strategies and policies more efficiently:

The guideline and recommendations for drug prevention and suppression to perform their work more efficiently are overall at the average level. Therefore, it is necessary to increase the efficiency level of “News Operation”, the efficiency of “arresting drug perpetrators”, and the efficiency of “cooperation with any involved agencies”. Aside from these, there must be an increasing struggle to eliminate the sources of narcotics, together with using policy with completion working joining with neighboring countries more seriously as well as facilitating convenient communication and providing more education to the minority group, allocating more investigation tools and equipment, and spending more budgets contributing to drug suppression. According to Takkatok, Pitaniabout, and Anornorm, (2017), the commanders play a crucial role in building morale and motivation to police officers who operate in drug suppression, together with increasing the support in materials and equipment for operation, providing more training for police officers so that they can be active to the updated situation. Furthermore, the place is another crucial factor contributing to the implementation of drug suppression with consistency by police officers because some areas are closed and have complicated routes, making it hard for the police officer to access the investigation. In contrast, many areas have open spaces making it easy for those drug traffickers to see the movement of police officers in the far distance and make an easy escape before being arrested by the police.

At present, the forms of drug trades are drastically changing, making it difficult for the police to arrest drug perpetrators and collect relevant evidence for making a successful case against them. According to Thanoemsreedech (2016), an important guideline for developing administrative management is to keep the operation in drug prevention updated by using modernized networks, such as internet, social media, and LINE application; at the same time, the municipal city should increase public relation and convince private sectors to participate in this mission. Touyeun (2015) found that the guideline to support cooperation in prevention and solution to the drug problem is to have government agencies hold meetings to identify operational plans joined by community leaders and people so that they can reach mutual understanding. Moreover, the community leader should be responsible for control and surveillance on drug addicts and perpetrators more consistently and thoughtfully. In the meantime, government agencies should support and encourage community leaders to receive frequent training and seminar as to giving sensible advice to those drug addicts and their families aside from giving supports to people and arousing them to partake in drug prevention and solution within their community in earnest. Furthermore, another interviewee explained his opinion about the guideline and suggestion to drug prevention and suppression by the Border Patrol Police in order to have work operation more efficiency by saying:

They should add and develop investigation tools and equipment, such as drone, bugs, GPS, firearms, armed force, and more expenditure to accommodate increasing workloads.

These comments are in agreement with another interviewee, who provides a guideline and suggestion to drug prevention and suppression for the Border Patrol Police, that it is essential to have their work performance be more efficient:

The guideline and suggestion for drug prevention and suppression by the Border Patrol Police should focus on increasing extra budgets to support frontier polices when they are working for drug suppression.

6. Recommendations

6.1 General recommendations

- 1) It is indispensable to provide more knowledge and understanding to children and minors covering plain and highland areas so that they can better understand the problem of narcotics.
- 2) It is advised to set activities and projects within the community so that the children in the community can spend their leisure doing beneficial activities as well as to provide them with knowledge about drug problems within their community.

6.2 Practical Recommendations

- 1) Both Royal Thai Police headquarters and Border Patrol Police Office should promote a campaign against drug problems. They should not only report news about arresting drug perpetrators, but they should also provide training in the armed forces and emergency practices in cooperation with any involved agencies to make their work operation related to drug problems more efficient.
- 2) The Royal Thai Police headquarters and the Border Patrol Police Office should provide financial support such as extra budgets to the frontier police in order to implement drug prevention and suppression.
- 3) The Royal Thai Police should work together with private organizations for drug prevention and suppression, such as building and promoting mutual understanding (MOU), including cooperation with other agencies throughout the region and globally.

7. References

- BBC News. (2019). *World Drug Report 2019: 35 million people worldwide suffer from drug use disorder, while 1 in 7 people receive treatment*, Retrieved July 6, 2019, from <https://www.bbc.com/thai/international-48765558>
- Chiang Mai News. (2018). *PACC summarizing overall operation in drug prevention in the year 2018*, Retrieved July 6, 2019, from <https://www.chiangmainews.co.th/page/archives/797498>
- Kumpantong, S. (2018). *The Problems and obstacles to drug suppression by the officer from Phutorn narcotics suppression unit, Yala Province*, Retrieved July 6, 2019, from http://www.sri.cmu.ac.th/~srilocal/drugs/research_files/research_57_0.pdf
- Laomitpon, A. (2015). *The problems and obstacles to implementation of drug prevention and suppression by Puthon Police Station in Pathum Thani Province*. Independent study, Master of Political Science Programs in Politics and Government, The Faculty of Political Science, Thammasat University.
- Manager Online. (2019). *Commissioner-General is visiting Chiang Rai to look after the operation of the prevention and suppressing narcotics, found drug perpetrators from Laos to Thai*, Retrieved July 6, 2019, from <https://mgronline.com/local/detail/9620000064001>
- Paterapulvadol, K., Jereanwong, J., & Threetot, S. (2017). *The problems to the implementation of drug prevention and suppression by the police officers at Phuthorn Police Station, Petchabun Province*. The report from proceeding academic seminar (Proceeding), proposing academic research works, the network of graduate study, Northern Rajabhat University 17th, 1323-1334.
- Suwanit, A. (2015). *The problems in the operation of the Narcotics Control and Prevention Center, Pohtong District, Angtong Province*. Independent Study, Master of Political Science Programs in Politics and Government, The Faculty of Political Science, Thammasat University.
- Takkatok, P., Pitanirabout, T., & Anornorm, S. (2017). The factors influencing the implementation of drug suppression of the police from Puthorn Police Station, Songkhla Province. *Journal of Humanities and Social Sciences*, 12(1), 223-249. Retrieved from <https://www.tci-thaijo.org/index.php/eJHUSO/article/view/82630/65663>

- Thanormsreedech, C. (2016). The study of administration in preventing drugs by city municipal according to the concept of sustainable administration. *Valaya Alongkorn Review Journal*, 6(3), 93-110.
- Touyeun, P. S. (2015). The guideline in building cooperation to prevent and solve drug problems by the community leader in Uttaradit Province. *Journal of Graduate School, Pitchayatat*, 10(1), 67-76.

A Systematic Review Exploring the Effect and Risk Mitigation Methods Surrounding the New IFRS 16

Pandate Romsaitong^{1*}, Molsikarn Tripattansit² and Tatinat Santisant³

^{1,2}Faculty of Accountancy, Rangsit University, Pathum Thani, 12000 Thailand

³Finance Department, Dusit International, Bangkok, 10330 Thailand

Email: ^{1*}pandate.r@rsu.ac.th, ²molsikarn.t@rsu.ac.th, ³tatinat.st@dusit.com

* Corresponding author

Received 13 December 2019 / Revised 16 January 2020 / Accepted in final form 20 January 2020 / Publish Online 9 February 2020

Abstract

The new IFRS 16 accounting standard represents a shift in regulations. The new standard took effect in January of 2019 and defines a non-cancelable period within a lease term. The new IFRS 16 standards essentially impact lessees to a greater degree than lessors. A gap in the literature exists regarding how the new accounting standard will influence businesses with respect to accounting of leases. Specifically, if leases have a non-cancellable period, it is unclear how it will affect businesses that, in fact, can cancel their leases at will. As such it is important to determine how businesses will account for leases with this change. By increasing clarity in this area, business managers can best make financially apt decisions and adopt regulations. In order to shed light on what businesses will be most impacted by the new IFRS 16, the present study is guided by the following objectives: 1) To determine impact of implementation of IFRS 16 2) To assess options to mitigate potential impacts 3) To gauge benefits of IT-tools as a method of IFRS 16 implementation management. Using a systematic literature review, the present study conducted a search of relevant search terms from four scholarly databases in addition to Google, considering empirical and business news literature published after 2010. Findings include: 1) High-profile businesses were deemed to be most impacted 2) IT tools are available but primarily relate to the effective and accurate practice of accounting methods rather than impacts of regulation. Some businesses use accounting methods such as smoothing to create more advantageous reports 3) Software and IT tools can aid businesses in reducing administrative and human labor costs, along with other benefits. These findings alert company managers with high-value leases of the potential impacts of management tools available for the new IFRS 16 standard.

Keywords: IFRS 16, standards, management, finance, IT

1. Introduction

New updates to IFRS regulations have resulted in the change from the previous IFRS 17 standard to a new IFRS 16 standard, which took effect January 1st of 2019. New IFRS 16 regulations have been a discussion of focus among financial institutions and private sector businesses alike. These discussions have examined how IFRS 16 updated regulations will impact businesses' financial health and accounting processes. The IFRS 16 is an accounting standard that characterizes and defines the non-cancelable period within a lease term. During the non-cancellable period, the lessee can use underlying assets and has no right to terminate the lease. This period is one where the entity in question is reasonably certain to exercise the option not to terminate a lease agreement.

The IFRS 16 improves comparability among corporations leasing and corporations borrowing in order to buy. Under IFRS 16 regulations, a lease constitutes a contract, which communicates participants' right to leverage a specific asset for a defined time period in exchange for consideration (PWC, 2019; IFRS Box, 2018; Silvia, 2016). In light of the regulatory discrepancies between the prior IFRS 17 and new IFRS 16, the present study seeks to understand, through systematic review, how the new IFRS 16 will specifically impact businesses and which businesses will be most affected. Following a background introductory discussion of the functional and structural nature of the IFRS 16, the present study documents the findings of a qualitative systematic literature review conducted in order to clarify the impact of the new IFRS 16 on private sector businesses.

1.1 Background Functionality of IFRS standards

The IFRS 16 governs and regulates how organizations report lease agreements between lessors and lessees, providing the right to control the use of a leased asset for a set time period, in exchange for a monetary consideration. IFRS 16 regulations do not apply, however, to low priced items and lease terms under 12 months. The predominant regulatory change between prior IFRS 17 standards and current IFRS 16 standards relates to the fact that lessees now do not classify leases into the finance and operating category anymore. Rather under the new standard, leases have no classification and leases must be accounted for all in the same manner except for two optimal exemptions. Furthermore, at the commencement of a lease, under the new IFRS 16, the lessee recognizes the right of use of the asset and lease.

Even during lease operation, the lessee always recognizes some asset—which constitutes the primary change from the prior IFRS 17 standard. Under the prior standard, all payments were recognized for operating leases under profit and loss statements (Silvia, 2016). Furthermore, accounting by the lessee at lease commencement encompasses the right of use of the asset and the lease liability. The lease liability is calculated as payments that are not paid by the commencement date, less the interest rate implicit in the lease. The right to use of the asset is calculated as the lease liability plus lease payments (incentives) on or before the commencement date, plus initial direct costs and estimates of dismantling costs. Leases are accounted for based on classification, and as noted, classification is made on a case by case basis since leases no longer are provided their own classification. From a lessor standpoint, leases may be classified as finance leases or operating leases, based on whether rewards and risks of the lease are transferred to the lessee. Additionally, as a finance provider, the lessor recognizes a lease receivable as a net investment in a lease and the total of fixed and variable payments that can be expected to be payable under residual payments (PWC, 2019; IFRS Box, 2018; Silvia, 2016).

As Silvia (2016) explains in summary, what may happen as a result of this new financial standard is that the lessee and the lessor can realize a financial asset, as compared to the previous system where only the lessor would realize the financial asset. For instance, as a lessor accounts for an operating lease, that operating lease will be calculated as lease payments which are equal to revenue on a straight-line basis, plus continual recognition of the asset. In some cases, a seller or lessor becomes a lessee in situations of a buyback.

These basic recognitions of functional changes lead one to question how the new standard will impact businesses, and in what way, especially once total direct and indirect financial impacts of the new accounting and regulatory standards are realized. These standards may result in organizations choosing to purchase land rather than lease it, as they see themselves losing the accounting benefits that leasing previously provided (Hazar, 2019). As PWC (2019) notes, this question is imperative to small and large businesses alike considering that the new IFRS 16 will affect almost every company, since nearly all companies use rentals and leasing in some way to access assets. Furthermore, PWC (2019) explains that the IFRS 16, in contrast to the prior IFRS 17 eliminates all off-balance sheets that account for lessees.

The new standard re-characterizes an array of commonly used financial metrics, which will increase comparability (as an advantage to many businesses), while also impacting credit ratings, borrowing costs and thus stakeholder's perceptions of borrowers—a potential negative impact on many businesses. More specifically, changes to commonly used financial ratios such as interest cover, EBIT, EBITDA, net income, ROCE, and operating cash flows can impact costs and credit, which could change business behavior and subsequently may cause businesses to re-evaluate leasing versus buying decisions. Because balance sheets will increase, this means gearing ratios will also heighten, while capital ratios will fall. This means corporations leasing high dollar assets may be most impacted (PWC, 2019).

According to IFRS Box (2018), the simplified objective and rationale of the new regulation are to disable lessees from hiding or non-revealing various lease-born liabilities. This specifically related to operating and non-cancellable leases. In contrast, the new IFRS 16 regulation mandates that lessees reveal and document all leases within their financial statements directly, rather than covering them up within indirect notes on the financial statements. In this way, accounting standards for lessors have gone mostly unchanged by the new IFRS 16 standard, while for lessees they have changed more dramatically impacting lessees' income, balance and cash flow statements. Furthermore, leases are not treated differently under the new standard when accounting for federal income taxes. In other words, the tax accounting method does not change. However, the new IFRS 16 may still impact tax accounting indirectly since increases in liabilities

or assets could impact financial statements and thus change the amounts of taxes owed (LeaseAccounting.com, 2017).

1.2 Problem Statement

IFRS 16 may cause issues with management, financial buying versus leasing decision-making, and clear record-keeping. In particular, businesses that do not fully understand the impact and implications of the new IFRS 16 will likely improperly report leases. One type of company that may be impacted is retailers who lease space. They will likely encounter issues in correctly accounting for variable payments linked to index rates or in separating non-lease and lease-related financial payment factors (Marwood, 2017). Thus, there is potential for different interpretations of the rule, as is true of all changes to IFRS. However, this is an important difference in interpretation because the practice will impact various metrics to evaluate the financial health of companies. Thus, the research question here is how this new standard will affect different businesses. Furthermore, it will be important to evaluate if these new standards will affect industries in different ways. Although it is clear that the only companies impacted by this change are ones that lease high-value assets, it is unclear whether, for example, large retailers will be affected differently from airline companies. Gaining greater clarity of how businesses will be impacted will aid these businesses in making more advantageous financial decisions and better coping with the IFRS 16 regulatory changes. Additionally, this research will evaluate the aspects of this change that will most impact businesses. It is anticipated that potential impacts may include but not be limited to changed HR administrative-accounting costs, new regulatory training costs, changes in taxes owed for businesses previously hiding assets and that retailers and corporations who are high dollar lessees may be most impacted (IFRS Box, 2018; LeaseAccounting.com, 2017; Marwood, 2017).

2. Objectives

The objective of the present study is to inform the following three research questions:

- 1) What impact does the implementation of IFRS 16 have on businesses and of the businesses that are affected, businesses in which sectors will be most affected?
- 2) What options are available to mitigate potential impacts?
- 3) Is the use of IT-tools as a method of IFRS 16 implementation management beneficial to businesses?

3. Proposition

Based off business analyst comments and empirical literature reviewed within the introductory background of this study (IFRS Box, 2018; LeaseAccounting.com, 2017; Marwood, 2017; Silvia, 2016), the present study speculates the following proposition in response to the aforementioned research questions:

- 1) The new IFRS 16 may change taxes owed for lessees as a result of indirect impacts of lease accounting upon financial assets and liabilities documented, as well as imposing training and administrative challenges in implementing and correctly abiding by the new IFRS 16 standard. The new IFRS 16 may also cause behavioral changes in buying versus leasing decisions made by affected companies. Companies with high-dollar leases (lessees) and retail businesses are anticipated to be most affected.
- 2) IT software accounting systems and in-house training seminars are speculated to provide potential means of minimizing the negative impacts of these aforementioned changes.
- 3) It is speculated that the use of such IT tools will be beneficial to most impacted businesses.

4. Materials and Methods

The present qualitative study employs a systematic literature review in order to inform the three research questions. For the present study, a qualitative approach is most appropriate considering that qualitative methodologies seek to answer the *how* and *why* natured questions of research with explanatory answers that cannot otherwise be answered using *yes* or *no* answers or quantitative, numerical information. Because the research questions of this study seek to understand how the new IFRS 16 standard impacts businesses, what businesses are affected, what IT measures could be used to manage these impacts and whether or not such IT tools are beneficial, such inquiries cannot be informed using numeric data. Hence, a

qualitative method that allows for in-depth explanatory data informing the study's objectives is most appropriate (Creswell, 2013). Systematic literature reviews have been used extensively through the interpretation of primary literature (SEDL, 2015), as the present study intends to do. Systematic literature reviews take an orderly, methodological approach to evaluating literature based on selection criteria and interpreting the results of literature to specifically inform the research questions and objectives. In other words, systematic literature reviews thematically interpret literature and can be used in qualitative and/or quantitative studies (University of Sydney, 2019).

Since the present study's systematic literature review is employed in a qualitative context, data collected from literature meeting selection criteria will include data that is explanatory in nature, including observational data, interview data, and interpretive data such as participant accounts of working experiences, accounting experiences and some numerical data regarding changes in businesses' financial statements. Though some numerical data will be considered, its interpretation will be explanatory in nature, as financial data will be used to explain and inform the nature of how new IFRS 16 standards impact businesses at large. Following the present study's systematic literature review, the present study will discuss and synthesize findings in order to fill gaps in understanding and contribute to existing literature informing business managers of how IFRS 16 standards will impact operations and potential measures that may be effectively used to manage such impacts. Systematic literature reviews have been used extensively in accounting research such as that of Northcott and Doolin (2008).

In order to conduct the systematic literature review and extract data relevant to the research objectives, eligibility criteria were first developed. The present study's eligibility criteria were applied to literature searches. Inclusion criteria included the following: 1) Literature must be either from a financial consulting business, a business or financial news publication, a peer-reviewed academic book, publication or journal article, 2) Literature must be published during 2010 or after, 3) Literature must be primary or peer-reviewed secondary evidence, 4) Literature may relate to global finance and is not excluded on the basis of place of publication. Exclusion criteria included the following: 1) Literature from non-empirical or peer-reviewed blogs was excluded, 2) Literature published before 2010 was excluded, except for that relating to any applicable theoretical frameworks. The following table 1 summarizes the inclusion and exclusion criteria:

Table 1 Inclusion and Exclusion Criteria for Systematic Literature Review

Inclusion Criteria
1) Sources: Financial consulting, business and finance news, peer-reviewed academic publications and journals
2) Published during or after 2010
3) Primary or peer-reviewed secondary evidence
4) Global
Exclusion Criteria
1) Non-empirical, non-peer reviewed blogs
2) Published before 2010 except for theory
Keywords: IFRS 16 Changes, Impact of IFRS 16 changes, Sectors most affected by IFRS 16 changes, Leasing accounting

The following search terms were employed through databases including Google Scholar, Jstor, ProQuest and EBSCO (Google was also searched for relevant business news publications): *IFRS 16 Changes*, *Impact of IFRS 16 changes*, *Sectors most affected by IFRS 16 changes*, *Leasing accounting*. In total, approximately 17,000 results populated search fields, averaged across all four databases. When search criteria were narrowed to 2010 and beyond, search results reduced to an average of 15,000. In total, 80 literature sources were included within the present study on the basis of relevance to the research questions and currency, as revealed by the order in which they appeared in the search results, as a method of selection omitting the potential for researcher selection and bias. 80 is a substantial number for inclusion in a literature review, yet in order to minimize labor incurred by the researcher and allow for a timely, cost-effective study,

the review was limited to 80 sources. These included regulatory and government publications, consulting, business and financial news publications, best practice and compliance documents, and journal publications. Literature was screened on the basis of the above inclusion and exclusion criteria before selection and inclusion. Studies published more recently, with more relevance to the research questions and published as academic journal articles were given preference over those published by news sources. Data were extracted from each piece of literature selected after a thorough review of the literature and based on the specific data within each piece of literature that most directly related to and informed each guiding research objective.

Consequently, the following results section presents data not according to sequential author, but according to subsections that relate to the present study's research objectives. In this way, data was synthesized and gathered with the guiding research questions in mind. For instance, key terms from objective (RQ) one directed the researcher's review of literature, during which the researcher scanned and screened literature with the objective in mind of understanding *how the IFRS 16 impacts businesses* and *what businesses the IFRS 16 impacts most*. Thus, the guiding terms included *how the IFRS 16 impacts* and *what businesses*. This allowed the researcher to extract relevant data from each study and compile/synthesize that relevant data into each of the subsections within the results. A similar approach was taken in order to inform the second two research questions, using guiding terms such as *IFRS 16 IT management tools* (RQ2) and *beneficial* (RQ3). The researcher used an excel chart to categorize and organize data excerpts from literature according to author, and according to each of the three objectives.

Hence, the materials required to conduct the present study simply included: 1) internet access to Google Scholar, Google, EBSCO, ProQuest and JSTOR, 2) a computer or mobile device, 3) MS Excel (for organizational purposes), and 4) MS word for the sake of organizing and synthesizing data. In this way, the present literature review simply collected, compiled and synthesized data informing the three research objectives from sources deemed as reliable, current and credible. In obtaining data from reputable sources, the present study's attempt was to provide a summary of unbiased, reliable, trustworthy data that would guide financial managers in decision making, IFRS 16 implementation, and management.

One primary limitation of the present study is characterized by the number of sources included. Because only 80 out of an average of 15,000 or more available sources were included, the study provides likely conclusions informing the objectives, but does not provide the generalizable fact that may apply to all businesses at large (Dhammi & Haq, 2018; Hewitt-Taylor, 2017). Additionally, the presence of heterogeneous studies within systematic reviews leads to the risk of resulting in false conclusions (Faryadi, 2018; Jahan, Naveed, Zeshan, & Tahirr, 2016). However, this limitation was offset as the researcher reviewed all 80 studies and ensured no heterogeneous studies were included, being that the study sample size allowed for the researcher to review this aspect. The following Results section provides a summary of the evidence collected.

5. Results

After a systematic review was implemented and approximately 80 sources were selected, evaluated and synthesized, the following results were gleaned and summarized according to this study's three primary research objectives. As such, the findings are organized according to the research- objective driven subheadings below. Each subheading category includes a synthesized description of the literature review findings relating to each objective-based theme.

5.1 Objective 1: What is the Impact of the IFRS 16 and Who is Most Affected?

A primary common theme uncovered through literature review included the finding that IFRS 16 standards seem to have the most impact on businesses leasing high dollar assets, and objectively speaking, have a greater impact in terms of accounting methods, on lessees rather than lessors. One way the IFRS 16 will impact lessees is by requiring greater transparency in accounting—in other words, disallowing lessees from hiding liabilities that are leases. By improving the transparency and subsequently comparability of leasing businesses' information, the new standard brings leases to businesses' balance sheets. Major impacts are seen by retailers and businesses leasing large real estate assets (Deloitte, 2019; KPMG, 2019).

As described by KPMG (2019), the IFRS 16 dramatically changes how lessees account for operating leases but do not significantly change how lessors account for leases. In doing so, and in contrast to the prior

IFRS 17 regulation, the new IFRS 16 standard moves rental agreements to lessees' balance sheets, when before leases were off the balance sheets, thus allowing these organizations to obfuscate the impact of the lease on their overall books (Joubert, Garvie, & Parle, 2107). Moreover, as noted in the introduction, the new standards do not require lease classification. Additionally, the new standard mandates that banks present lease assets that originate from leased properties that are tangible assets (Morales-Diaz & Zamora-Ramirez, 2018). Lease depreciation and liability interest are then characterized in the bank's income statement during the lease term. This is similar to the manner in which finance leases were treated under IAS 17, essentially leading to increased expenses during the beginning of the lease term (KPMG, 2019; PWC, 2019). This also implies that financial organizations with material leases that were not previously noted on their balance sheets will now report a higher quantity of assets and lower equity. This in many cases impacts these businesses' regulatory capital, leading to a primary consideration for such banking institutions, which is: how to categorize assets for regulatory purposes. In this way, banks' entire risk-weighted assets and capital ratios are impacted. Therefore, it is clear that large-scale banks, especially those with considerable real estate assets will be dramatically impacted by the new IFRS 16 regulation (Deloitte, 2019; KPMG, 2019).

For instance, KPMG (2019) report indicated that among 20 European banks surveyed, an average of .5% decrease in reported equity was realized. Deloitte (2019) confirms these assumptions by stating that banks' financial balance sheets will encounter changes and that corporations with material off balance sheet leases will experience financial metric changes including changes to leverage ratios, ROIC, as well as valuation ratios. Deloitte speculates that equity value calculations are less subject to change, while enterprise values will likely increase. Furthermore, the influence of these changed ratios on financial operations will require increased attention to overall corporate business valuation as well as to Mand transactions (Deloitte, 2019). The TMF Group (2019) also describes the impact of the new IFRS 16 on companies Profit and loss statements, as corporate rental expenses have become front-loaded as a result of lease liability interest while net profits have fallen. Additionally, EBITDA values have and are anticipated to continue to increase while rental expenses and operating costs area excluded from EBITDA calculations. KPIs relating to Profit and Loss Statement measures, treasury metrics, and loan covenants are also anticipated to be influenced, along with cash flow (Deloitte, 2019; TMF Group, 2019). Conclusively, TMG group summarizes that the new IFRS 16 will significantly impact businesses that specifically use leases to access assets in shipping, real estate (PWC, 2019), aviation and retail—in other words, high-value assets. With this in mind, it seems correct to presume that the new IFRS 16 will have a tremendous impact on high-profile banks, retailers and other industries with high-dollar leases (lessees) used as a means to access assets (Sari, Altintas, & Tas, 2016).

Literature also suggested investors will be and are heavily impacted by the new IFRS 16 regulation. Because lease terms will be included on balance sheets, lease terms will become increasingly transparent and all stakeholders, including investors, will be able to view lease terms. This implies a shift in liabilities and assets during 2019. Hence, high profile corporations must take care to explain any changes in financial metrics and positions in order to protect investor relations and confidence (TMF Group, 2019; Todorova, 2019; Okunbor & Arowoshegbe, 2014). Vardia and Shiv Lal (2019) discuss speculations and findings of the impact of the new IFRS 16 on investors' and stakeholders' perceptions of lessees. In summary, the authors found a significant difference between stakeholder perceptions in academia versus in the business world, suggesting the importance of evaluating the impacts of the IFRS 16 both theoretically and practically, using a variety of empirical and also business news sources, as this study does.

Airline companies may also be dramatically impacted by the new IFRS 16 standard considering that airline companies lease and account for high-dollar, high-profile assets, and collateral. Alabood, Bataineh, and Abuaddous (2019) discuss some of the impacts of the new standard on airline company contracts, as demonstrated by a case study of Middle Eastern airline companies, many of which revealed a 77% financial reliance on operating leases. Alabood et al. (2019) concluded that the new standard introduces considerable challenges for airline companies who do not yet own large assets such as aircraft but instead lease the majority of aircraft. Consequently, this may impact investors' confidence in and interest in these airline companies. Therefore, the potential ripple effects of the new IFRS 16 on airline companies, among banks and retailers is layered and multi-faceted, impacting now only cash flow and financial ratios, but also Profit and Loss Statement and investor interest, and therefore potentially projected future financial stability and health (Todorova, 2019).

Similarly, telecommunications will be significantly impacted by this change (Liviu-Alexandru, 2018). In particular, because telecommunications companies often heavily rely on leases to support their endeavors including leased land for antennas, wires, and other infrastructure. Furthermore, telecommunications companies are also engaging in sale and leaseback transactions to reduce their costs (Sieverding, 2018). Accordingly, these transactions will be significantly impacted by these accounting changes because they will not be able to mask liabilities related to asset ownership through leasing. In addition, steel companies or other companies that rely heavily on leased fleets will likely not be able to continue to mask the costs associated with these leases with the new standards (Carabott, 2019). The result of this will be that these companies may choose to purchase assets or may experience cooled investor sentiments towards these sectors.

Despite sources such as the Alabood et al. (2019); Deloitte (2019); PWC (2019); TMF Group (2019), and Todorova (2019) documenting the numerous changes and impacts brought about by the IFRS 16 to high-profile organizations with high-dollar leases, Opore, Houqe and Van Zijl (2019) discuss the fact that a large, parallel body of literature seems to report mixed and sometimes conflicting findings regarding the impacts of the new standard. Opore et al. (2019) found, in most cases, that IFRS 16 adoption among a variety of corporations increased the comparability of financial reporting, increased market liquidity, minimized equity cost and the cost of debt was only decreased in cases of in which the standard was voluntarily adopted. In other words, Opore et al. (2019) demonstrated that the impacts of the IFRS 16 differed depending on whether the standard was adopted voluntarily or as mandatory. Such findings and conclusions were predicted before the new standard released by Wu and Zhang (2018) as well as Gu, Ng, and Tsang (2019).

The authors' findings reviewed thus far regarding the impacts of new IFRS 16 implementation are in contrast to Said (2019) findings regarding the lack of earnings influence of prior IFRS standards, due to the new ways in which the IFRS 16 standard increases lease transparency (Aruini, 2019; Borges, 2019; Iwanowicz, 2018; Krawcsak & Dylang, 2018; Lin & Wang, 2017). Krishnan and Shang (2018) speculate that the new standard increases the earnings quality of impacted organizations. However, research such as that of Rodriguez Junior, Hein, Wilhelm and Kroenke (2015) suggest that the impact of IFRS 16 adoption varies according to national, geographic and global context, and is different for different nations. In summary, the literature suggests the new IFRS 16 standard will most dramatically impact high profile banks, airline companies, and retailers by influencing financial ratios, Profit and Loss Statement, and potentially investor perceptions.

5.2 Objective 2: What IT Options are Available to Manage and Mitigate the IFRS 16 Impact?

Because the IFRS 16, in contrast to the prior IFRS 17 standard, represents a fundamental change in how high profile, bank, retail and airline businesses among others engage in accounting standards, these businesses have a vested interest in potential options available for minimizing and mitigating the financially detrimental, cumbersome, and labor-intensive impacts of the IFRS 16 on financial health (Segal & Naik, 2019). This includes identifying means of more cost-effectively, efficiently and accurately accounting and minimizing the administrative-accounting costs entailed in accounting for the change. Some of these costs, including the costs of excessive administrative and accounting overhead, may be offset with the use of IT accounting management tools including IFRS software (PWCA, 2019; Wei, 2019). However, DDL Financial Partners (2019) warns that it is imperative for businesses adopting the new IFRS 16 standard to not only view the new standard as a financial change and issue alone. In other words, it is imperative to recognize that the adaptation of the new standard will undoubtedly impact broader-scale business behaviors such as stakeholder relationships and purchasing versus leasing decisions as a result of the immediate financial impacts. As such, effective management software may aid in alleviating the immediate administrative-accounting burdens incurred with the adaptation of the new IFRS 16 so that business managers can more comprehensively focus on broad-scale focuses and aspects of business health (3 Characteristics of Full IFRS and IFRS for SMEs adoption, n.d.; 4 Determinants of Full IFRS and IFRS for SMEs adoption, n.d.).

Information technology and data-driven decision making will be important in moving forward with this change to IFRS 16. Software and IT tools aiding in the management of IFRS 16 standards may not only include immediate software accounting tools that can aid in correctly computing metrics and cash flow ratios under the new standard but may also include tax calculation software (Mulyadi, 2012). While the new

standard does not change the method of tax calculations itself, it could change assets and liabilities that would impact taxes owed. For corporations looking for comprehensive, all-in-one financial management software tools, updated software that is programmed according to the new standard may be helpful (Mulyadi, 2012).

One study examining the compliance of European institutions with IFRS regulations found that a significant percentage of corporations exhibited noncompliance with IFRS standards due to the logistical challenges presented by regulatory changes—resulting from a lack of internal accounting knowledge and understanding of new standards and a lack of efficient tools, suggesting the need for and benefit of technologies that could aid corporate accountants and administrators in more accurately and cost-effectively adopting standards (Mario, Lars, Gary, Baboukardos, & Cunningham, 2011; Trewavas, Botica Redmayne & Laswad, 2012). Moreover, Jermakowicz and Gormik-Tomaszewski (2006) found that most high-profile EU corporations examined found IFRS implementation to be costly, complex, cumbersome and financially burdensome. Accordingly, having specific information technology that properly accounts for these changes is critical. It could not only help organizations navigate what is a very cumbersome change, but it will also create some consistency among the companies that use the accounting software.

Kim, Liu, and Zheng (2019) found that institutions engaging in mandatory IFRS adoption incurred greater audit fees than organizations voluntarily engaging in IFRS adoption—a finding that suggests IFRS audit fees increase according to the extent of accounting required. Hence, using computing software such as IFRS System, Grant Thornton Software, and NetSuite Financials may aid corporations that are not voluntarily adopting IFRS 16 standards in saving on accounting and human labor costs, knowing that audit fees may increase. However, appropriate tools may vary according to international and national contexts (Giner, Merello, & Pardo, 2019; Nurunnabi, 2019). Toumeh and Yahya (2019) explored various IFRS 16 management techniques employed by different global corporations finding that some IFRS management techniques, otherwise known as earnings management techniques, are being employed as a means of fraudulent practices and in order to evade the reporting transparency mandated by the IFRS 16 in the first place. Such issues were also speculated and recognized during the prior IFRS requirements (Better Rate Practices Can Avoid Revenue Surprises, 2018; Mulford & Comiskey, 2011). The adaptation of the new standard has led some companies to recognize revenue early, before finalizing performance obligations under contract, essentially by recording predicted future sales during the current contract period's last day, as a means to boost reported earnings (Wasiuzzaman, Sahafzadeh, & Rezaie Nejad, 2015). This is an example of a method in which companies are using revenue prediction software to evade IFRS-intended transparency. Hence, though it is a management or coping mechanism, it is an ethically questionable one. Such practices are not new alongside the new IFRS 16 release but were also engaged in previously (Nieken & Sliwka, 2015; Omar, Rahman, Danbatta, & Sulaiman, 2014; Zhou & Habib, 2013).

The term *income smoothing* describes another method of earnings and income management engaged in by corporations adopting the IFRS 16 standard. Income smoothing refers to leveling the influx of incremental net income alterations. This method is a component of earning management and produces the appearance of consistently increased earnings, as generated by accrual accounting. This often involves allocating capital costs using straight-line methods as expenses, over a set time period. Simply stated, smoothing is used to minimize perceived and reported income fluctuations, which are otherwise indicative of bankruptcy risk (Obaidat, 2017; Rusmin, Scully, & Tower, 2010; Safdar & Yan, 2016; Shanszadeh & Zolfaghari, 2015). Real income smoothing impacts cash flow whereas artificial income smoothing, which relates to IFRS management discretions, does to influence cash flow (Lassaad, 2013; Li & Richie, 2009).

Another management tactic, known as the use of *cookie jar reserves*, relates to a strategy in which future events are estimated. Essentially, it is a form of income smoothing and involves manipulating earnings using the accrual of expenses indicating plausible results for current years but unknown results for future years. Through the cookie jar reserves method, future projected expenses are reduced by inflating future earnings at current year expenses; income is projected to increase while expenses are anticipated to stay the same. This tactic is used by managers in calculating balance sheets to appear more plausible in light of the new IFRS 16 reporting standard, by minimizing liabilities and increasing assets (Chhabra, 2016; El Diri, 2017; Hashim, Salleeh, & Ariff, 2013; Omar et al., 2014; Rahman, Sulaiman, Fadel, & Kazemian, 2016).

In many cases, the use of management techniques and software in the application of IFRS standards was heterogeneously implemented by corporations—in other words, some corporations used software to aid

in the legitimate reporting, while others used accounting methods to find loopholes or evade transparency (Franceschetti, 2017; Kighir, Omar, & Mohamed, 2013). Therefore, while various software and accounting methods remain available to corporations potentially as an aid in IFRS implementation, the nature in which this software is employed remains at the discretion of corporate financial managers (Toumeh & Yahya, 2019).

5.3 Objective 3: Is the Use of IT Tools Beneficial for IFRS Implementation Efforts?

As described above, businesses exhibit mixed results regarding the nature of how IT tools and accounting methods are used to manage IFRS implementation. While in most cases management methods and IT tools are used to the advantage of corporations implementing them, in some cases they are used legitimately and in some cases, they are not (Carikci & Ozturk, 2019; Franceschetti, 2017; Kighir, Omar, & Mohamed, 2013; Toumeh & Yahya, 2019). Whether or not accounting technologies, instruments, and new method are beneficial to businesses in IFRS implementation efforts remains debatable. According to a report published by Andrzejewski and Dunal (2016), a bulk of accounting instruments used by global corporations to implement a variety of international accounting standards were criticized for their complexity and the lack of congruency between software ability, capacity and functionality, and businesses' real needs.

A study examining the impacts of IFRS 16 on US, UK, and New Zealand companies found that many financial ratios underwent dramatic changes as a result, similar to those stated by prior authors reviewed (Natarajan & Kuniparambil, 2019). As a result, software such as that provided by IFRS System, Grant Thornton Software, and NetSuite Financials may aid these companies in more accurately validating and calculating ratios. This sense, such software, and IT tools are helpful in improving calculation accuracy and reducing administrative costs associated with IFRS accounting, but these technologies are not necessarily advantageous when it comes to minimizing the impacts of the IFRS 16 regulatory changes themselves. In other words, when legally applied, these software do not change the manner in which financial ratios are impacted (IFRS, 2019) and thus do not change the manner in which assets and liabilities, and leases, are reflected on businesses' reported balance sheets—which could be detrimental to businesses with high-value leased items such as real estate and aircraft.

A primary challenge encounter by IFRS 16 adopting companies to be lacking knowledge of how to practically implement the IFRS standard (Hache, 2019). Specifically, corporations examined lacked knowledge of what technologies to use to most successfully account under the new IFRS standard. Companies also lacked adequate IFRS 16 training, suggesting that IFRS 16 training software, in addition to accounting management software, may be beneficial to businesses adopting the new standard (Sresli, Kharabadze, & Sreseli, 2016). Training software, such as that provided by IFRS Box (2018) and the IFRS (2019) claims to aid businesses in implementing the new standard by providing digital educational materials such as webinars, literature, group meeting resources, chat groups, and other online learning resources. Other technology systems that may be useful to corporations adopting the new standard include financial sub-ledgers, software valuation systems, and data marts, or data consolidation software (Deloitte Consulting LLP, 2019). Such software can aid businesses in preparing consolidated and accurate compiled metrics that will be used within IFRS 16 reporting.

Dulitz's (2010) publication documents best practices regarding IFRS implementation—specifically surrounding internal corporate education and education phase-based technologies for smooth adaptation and corporate benefit. Dulitz recommends that businesses begin with internal education surrounding standard changes, accounting methods, and audit practices. Training should occur at an administrative, managerial and employee level. The first, second, and third phases should entail analysis and assessment, implementation and finally post-implementation assessment (BDO, 2019). Associates such as Mowery Schoenfeld (2019) provide coaching and consulting services aimed at helping businesses successfully adopt technologies through IFRS and accounting standard implementation processes, many of which are broken into four sub-phases including impact assessment, planning, implementation, and review—similar to the practices recommended by Dulitz (2019).

Because leasing has become a more common practice within businesses, in order to facilitate operations in addition as a means to a means to accrue assets, lease accounting automation is becoming increasingly imperative for businesses to implement (Hendrie, 2019). Using a purposefully designed software can help companies in managing central lease portfolios—an action that will aid businesses in ensuring all

leases are accounted for in compliance with new standards. Lease accounting software can benefit corporations by helping to automate and ensure compliance, which can subsequently prevent costly audit expenses.

Lease automation systems include but are not limited to LOIS, which specializes in aiding businesses with automatic renewals, ending lease charges and more. Using a system such as LOIS can aid businesses in ensuring corporate proprietary, intellectual and financial information is protected and secured. Storing data electronically reduces the risk of compromised paper files while reducing administrative organization labor. Furthermore, the use of a reputable software such as LOIS also aids in maintaining and ensuring cybersecurity (Hendrie, 2019; Nonye S, 2019). As Nonye notes, the new requirements of the IFRS 16 almost require the use of software in the management and implementation of new standards, when considering the complexity of the reporting requirements coupled with the growing number of leases engaged in by companies.

Additionally, the ACCA (2011) noted that interoperability is an important consideration through the implementation of any accounting software. In other words, whether the software is scalable, operable and user-friendly by multiple departments and for multiple purposes is highly important. The more interoperable and versatile a software is, the more beneficial, long-lasting and comprehensive it may become for an organization. Hence, in light of current IFRS adaptation software, interoperable software is likely more beneficial than compartmentalized, highly exclusive and specialized software. Interoperable software is likely also more cost-effective, especially for larger companies requiring a multi-purpose, all-inclusive software (ACCA, 2011; Watson, 2010; Zhu & Wu, 2011). Furthermore, automation software is beneficial in accounting and compiling metrics in the sense that previously, managers and accountants would wade their way through volumes of financial data, manually. However, updated IFRS management software aids in automatically tabulating data, which saves dramatically on administrative costs (Chamoni, 2007; Watson, 2010).

Kim, Lin and No (2012) examined the impact of XBRL use as a digital language technology, finding that use resulting in increased computing efficiencies, decreased volatility and minimized stock return changes, among over 400 firms evaluated. In this way, Kim et al. (2012) findings in addition to Plumlee and Plumlee (2010) findings suggest that the use of automation software may decrease volatility as a result of more effectively managing and balancing administrative costs as well as financial calculation and accounting accuracy and efficiency. Plumlee and Plumlee specifically evaluated the use and efficacy of XBRL (extensible business reporting language), finding that XBRL allowed businesses to omit error and improve efficiency.

6. Summary

The findings documented herein reveal several important considerations. First, findings revealed that business most impacted by the new IFRS 16 standard vary globally, however, most consistently, businesses with high-value leases such as real estate, aircraft, and banks may be most impacted in ways including but not limited to changed cash flow ratios, changed accounting metrics and consequently, changed liabilities and assets that may impact and change taxes owned. Findings also revealed that automation software is available to help businesses manage and successfully implement the new IFRS standards. However, how businesses use accounting practices and software varies, with some businesses using available resources in legitimate ways that are in line with regulatory compliance, while other businesses leverage accounting tactics as a means to inflate assets, reduce liabilities, and hide leases in an attempt to minimize detrimental financial impacts, at the expense of increased audit risk. IFRS 16 software including automation software can aid businesses in reducing administrative and accounting overhead while also aiding businesses in keeping more clear records. Finally, software and consulting resources are available that may aid businesses in successfully training employees and managers regarding best practices through the IFRS 16 implementation process.

7. Discussion

Based on the results discussed previously, the present study presents the following major conclusions informing the three research objectives: 1) High profile lessees with high dollar leased assets such as real estate, retail, banks, and aircraft were found to be most impacted, while impacts occurred in

multiple ways such as indirect tax and stakeholder relationship influences as well as direct impacts of accounting ratios and metrics. 2) IT tools for IFRS management exist but primarily aid in the effective and accurate practice of accounting methods, and do not change or minimize the impacts of the regulation itself. 3) Software and IT tools can reduce administrative and human labor costs associated with IFRS implementation and accounting and can help businesses implement companywide IFRS update education.

These findings are significant to the extent that they aid managers in understanding how a company may be impacted by the new IFRS 16 standard, and what resources are available for successful implementation and management. Such considerations are especially imperative considering that leases are becoming more and more common. Businesses use leasing as a means to facilitate operations and gain access to assets. However, based on the results reviewed above, as the new IFRS 16 makes it more difficult to hide leases on financial reports, more and more businesses, especially those such as aircraft businesses such as airlines, real estate businesses, high profile banks, and mega-retailers may decide to engage more actively in buying decisions as opposed to leasing decisions. Essentially, the new IFRS 16 standards increase lease transparency (Arduini, 2019; Borges, 2019; Iwanowicz, 2018; Krawcsak & Dylang, 2018; Lin & Wang, 2017) and thus primarily impact lessees rather than lessors.

The findings of this study and the conclusions drawn are in line with the speculated hypotheses of this study. To begin with, literature revealed that in some cases IFRS 16 changes to financial ratios can impact total assets and thus taxes owed. Whether or not more and more businesses are moving to buying decisions rather than leasing decisions remains to be understood and composes a potential area of future research that could enlighten business managers' understanding of the most advantageous forms of operation and financial behavior while still remaining compliant. In other words, future research may seek to examine issues and questions such as 1) whether or not more high profile businesses are choosing to buy as a result of the IFRS 16, and 2) if and how buying is deemed to be financially advantageous over leasing in such situations, as a consequence of the IFRS 16.

This study's second hypothesis was rejected. It was not found that IFRS software and automation software directly minimizes the detrimental impacts of the IFRS 16 regulations itself, in terms of changed financial ratios. However, it was found that the use of such software can benefit corporations by increasing administrative efficiency, accounting accuracy, and compliance—all of which have indirect financial benefits on a company. Finally, in this way, it was found that the use of automated software and IT management accounting tools are beneficial in different ways, to businesses adopting new accounting standards.

Additionally, the results were inconclusive regarding which businesses and what percentage of businesses use software to facilitate noncompliance and identifying loopholes to IFRS 16 compliance, potentially due to the anonymity of corporations involved in research. However, future research may seek to examine, through primary research, nature and industrial class of companies that are most interested in avoiding lease documentation. This may aid policymakers in improving transparency standards. Furthermore, the results documented within this study serve to alert corporate managers and global companies of the importance of adopting automated accounting software in an effort to improve operational and administrative efficiency. Furthermore, these results suggest the importance of abiding by regulatory compliance in order to avoid the negative impacts of audits.

It is also interesting to note that the new IFRS 16 standards do little to impact lessors, but rather, primarily impact the accounting methods of lessees, while leaving leases unclassified (KPMG, 2019). This is interesting in that it seems to discourage leasing. Ironically, while the new standard claims to aim at improving leasing transparency, it could be argued that due to the impacts resulting from changed financial ratios, it may actually incentivize the pursuit of additional loopholes that can be used to hide leases and inflate reported assets. In this way, it would be helpful to both policymakers as well as lessees for future research to examine the company's incentives for buying versus leasing, in order to determine if IFRS 16 reporting standards have anything to do with de-incentivizing leasing and incentivizing buying. Additionally, future research may examine whether or not there has been a change in illegitimate reporting as a result of the IFRS 16. While the new standard aims to improve transparency, it remains unknown if the new standard has accomplished this goal, or if the new standard has merely incentivized a greater drift into illegitimate reporting by businesses. Research clarifying such a question would aid in the effective creation of policy as well as businesses in understanding and maintaining regulatory compliance.

Overall, based on the findings documented herein, the IFRS 16's impacts on lessees, at large, do not seem to be financially advantageous. Rather, a greater financial detriment seems to be imposed on lessees, than an advantage, as a result of the new standard. However, this impact is variable based on a case-by-case basis as well as influences by geographic, industry type and asset versus liability metric factors. At large, because more companies are leasing, the IFRS 16 presents increased challenges to high profile businesses.

8. Conclusion

The present study examined the impact of the IFRS 16 on businesses while aiming to understand which businesses are most impacted and how, what IT tools are available for use in implementing IFRS 16 standards, and whether or not those tools are beneficial to businesses. Hence, the present study contributes to existing empirical financial literature discussing international financial regulations by narrowing a gap in understanding regarding the impacts of the new IFRS 16. While the present study was limited in the amount of literature reviewed, it nonetheless reached the following conclusions: 1) Primarily, lessees and high-profile businesses with high-dollar leases are most impacted in terms of accounting and cash flow ratios, which could detrimentally impact taxes owed and stakeholder perceptions. This includes banks, airline companies, and retailers. 2) Mitigating the potentially direct negative impacts of the IFRS 16 on lessees cannot be legitimately done, however many businesses use accounting tactics too still try and hide leases or inflate asset values on reports. Moreover, software and IT tools are available for use in improving the accuracy of reporting, the accuracy of compliance, and in reducing administrative costs incurred as a result of accounting.

The present study's systematic literature review included empirical data and data from business news sources, as well as reputable consulting firms. Data were both primary and secondary and published on or after 2010. The present study thus provides a synthesis of the literature on the topic of the new IFRS 16 influence that will be useful to financial policymakers and business executives seeking to improve the financial operational efficiency, health, and sustainability of their companies while minimizing audit risk and optimizing regulatory compliance. Despite the extent of information documented through this systematic literature review, the present study still left questions unanswered and indicates need for additional research, including on the extent to which the new IFRS 16 regulations have inspired high profile businesses to move to purchasing rather than leasing and the degree to which the new standard has incentivized noncompliance and illegitimate reporting—the opposite of the transparency the standard intends to bring about. While lessors are minimally impacted, lessees are represented with the most challenges as a result of the new IFRS 16 standards. This study provides evidence concluding that it would behoove high profile corporations to seek consulting advice and implement automated software through the implementation of the IFRS 16 standard.

9. References

- ACCA. (2011). *Financial reporting*. UK, London: BBP learning media.
- Alabood, E., Bataineh, H., & Abuaddous, M. (2019). The impact of IFRS 16 on airline companies: an exploratory study in the Middle East. *International Journal of Economics and Business Research*, 18(1), 112-128. <https://doi.org/10.1504/IJEER.2019.10021083>
- Andrzejewski M., Dunal P. (2016), The balance sheet under Polish regulations vs. IFRS, Anglo-American University, Praga.
- Arduini, S. (2019). Earnings quality in the insurance companies. A perspective view of the changes expected by IFRS 17. *Corporate Governance: Search for the advanced practices*, 36-38. <https://doi.org/10.22495/cpr19a8>
- BDO Sanyu. (2019). *Preparation for IFRS implementation*. Retrieved from <https://www.bdo.or.jp/en-gb/services/audit-assurance/introduction-of-ifrs/preparation-for-ifrs-implementation-en>
- Better rate practices can avoid revenue surprises. (2018). *Journal - American Water Works Association*, 110(11), 12-13. <https://doi.org/10.1002/awwa.1182>
- Borges, S. (2019). *The expected impact of IFRS 16 on retail companies*. Retrieved from <https://bibliotecadigital.fgv.br/dspace/handle/10438/27577>
- Carabott, D. (2019). *An IFRS 16 analysis: a focus on the leasing of fleet vehicles* (Master's thesis). University of Malta, Msida, Malta.

- Carikci, O., & Ozturk, M. S. (2019). Developments in Earnings Management Practices in the IFRS Perspective: An Application in a Public Company. In J. Oliveira, G. Azevedo, & A. Ferreira (Eds.), *International Financial Reporting Standards and New Directions in Earnings Management* (pp. 274-288). Hershey, PA: IGI Global. <https://doi.org/10.4018/978-1-5225-7817-8.ch013>
- Chamoni P. (2007). XBRL and Business Intelligence. In *New Dimensions of Business Reporting and XBRL*. Germany: DUV. https://doi.org/10.1007/978-3-8350-9633-2_8
- Chhabra, S. (2016). Earning management: A study. *Splint International Journal of Professionals*, 3(11), 40-44.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Deloitte. (2019). New IFRS 16 leases standard. The impact on business valuation
Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/mergers-acquisitions/deloitte-nl-ma-ifrs16-impactonbusinessvaluation1.pdf>
- Deloitte Consulting LLP. (2019). *Technology implications of IFRS adoption for U.S. companies*. Retrieved from <https://www.iasplus.com/en/binary/usa/0808ifrs16technology.pdf>
- Dhammi, I., & Haq, R. (2018). How to write a systematic review or meta-analysis. *Indian Journal of Orthopaedics*, 52(6), 575. https://doi.org/10.4103/ortho.ijortho_557_18
- DLL Financial Partner. (2019). *7 common pitfalls to avoid for companies moving to IFRS 16*. Retrieved from <https://www.dllgroup.com/en/blogs/blogsoverview/7-common-pitfalls-to-avoid-for-companies-moving-to-ifrs-16>
- Dulitz, L. (2010). *IFRS: A preparer's point of view*. Retrieved from <https://www.journalofaccountancy.com/issues/2009/apr/preparerspointofview.html>
- Dunal, P., Andrzejewski, M., & Ozga, P. (2019). True and fair view of derivative instruments in hedge accounting model under IFRS 9. *Acta Universitatis Lodzensis: Folia Oeconomica*. Retrieved from <https://www.czasopisma-test.uni.lodz.pl/index.php/foe/article/view/2952>
- El Diri, M. (2017). Motives of earnings management. In *Introduction to Earnings Management* (pp.63-108). Switzerland: Springer. https://doi.org/10.1007/978-3-319-62686-4_4
- Faryadi, Q. (2018). Ph.D. thesis writing process: A systematic approach—How to write your literature review. *Creative Education*, 9(16), 2912 - 2919. <https://doi.org/10.4236/ce.2018.916219>
- Franceschetti, B. M. (2017). Earnings management : Origins. In *Financial Crises and Earnings Management Behavior* (pp.15-74). Switzerland: Springer. https://doi.org/10.1007/978-3-319-54121-1_2
- Giner, B., Merello, P., & Pardo, F. (2019). Assessing the impact of operating lease capitalization with dynamic Monte Carlo simulation. *Journal of Business Research*, 101(August 2019), 836-845. <https://doi.org/10.1016/j.jbusres.2018.11.049>
- Gu, Z., Ng, J., & Tsang, A. (2019). Mandatory IFRS adoption and management forecasts: The impact of enforcement changes. *China Journal of Accounting Research*, 12(1), 33-61. <https://doi.org/10.1016/j.cjar.2018.09.001>
- Hache, A. (2019). *Challenges and opportunities in adopting IFRS by private commercial banks* (Master's thesis). Ethiopia : Addis Ababa University. Retrieved from <http://213.55.95.56/bitstream/handle/123456789/17143/Alexander%20Hache.pdf?sequence=1&isAllowed=y>
- Hashim, H. A., Salleh, Z., & Ariff, A. M. (2013). The underlying motives for earnings management: Directors' perspective. *International Journal of Trade, Economics and Finance*, 4(5), 296-299. <https://doi.org/10.7763/ijtef.2013.v4.304>
- Hazar, A. (2019). *The impact of the new lease accounting standards-IFRS 16-on corporate real estate decisions: especially on real estate transactions* (Master's thesis). Switzerland: University in Zürich.
- Hendrie, R. (2019). *Automating lease accounting implementation. How software will Help*. Retrieved from <http://blog.innervision.co.uk/blog/automating-ifrs-16-lease-accounting-implementation-how-software-will-help-0>

- Hewitt-Taylor, J. (2017). What is literature review methodology?. In *The Essential Guide to Doing a Health and Social Care Literature Review* (pp.1-6). <https://doi.org/10.4324/9781315643472-1>
- IFRS. (2019). *Supporting the implementation of IFRS Standards*. Retrieved from <https://www.ifrs.org/supporting-implementation/>
- IFRS Box. (2018, February 9). IFRS 16 leases - Summary. Retrieved from <https://www.ifrsbox.com/ifrs-16-leases-summary/>
- Iwanowicz, T. (2018). Introduction of IFRS 16 and its expected impact on the financial position of companies listed on the Warsaw Stock Exchange. *Zeszyty Teoretyczne Rachunkowości*, 97(153), 45-56. <https://doi.org/10.5604/01.3001.0012.0375>
- Jahan, N., Naveed, S., Zeshan, M., & Tahir, M. A. (2016). How to conduct a systematic review: A narrative literature review. *Cureus*, 8(11). <https://doi.org/10.7759/cureus.864>
- Jermakowicz, E. K., & Gornik-Tomaszewski, S. (2006). Implementing IFRS from the perspective of EU publicly traded companies. *Journal of International Accounting, Auditing and Taxation*, 15(2), 170-196. <https://doi.org/10.1016/j.intaccudtax.2006.08.003>
- Joubert, M., Garvie, L., & Parle, G. (2017). Implications of the new accounting standard for leases AASB 16 (IFRS 16) with the inclusion of operating leases in the balance sheet. *The Journal of New Business Ideas & Trends*, 15(2), 1-11.
- Kighir, A., Omar, N., & Mohamed, N. (2013). Opportunities, motivations and approaches of earnings management: a structured theoretical review of the corporate virus. *International Journal of Auditing Technology*, 1(3/4), 312. <https://doi.org/10.1504/ijaudit.2013.057730>
- Kim, J.B., Liu, X., Zheng, L. (2010). Does mandatory IFRS adoption impact audit fees? Theory and evidence. In The 2010 Annual Conference of the Canadian Academic Accounting Association (CAAA)(pp.1-41) Hong Kong : University of Hong Kong. Retrieved from <https://core.ac.uk/download/pdf/38054323.pdf>
- Kim, J. W., Lim, J., & No, W. G. (2012). The effect of first wave mandatory XBRL reporting across the financial information environment. *Journal of Information Systems*, 26(1), 127-153. <https://doi.org/10.2308/isis-10260>
- KPMG. (2019). *IFRS 16 leases? Impact on financial institutions*. Retrieved from <https://home.kpmg/ch/en/home/insights/2018/03/ifrs-16-leases-impact-on-financial-institutions.html>
- Krawczak, M., & Dyląg, R. (2018). The impact of IFRS 16 on the financial position of selected companies from the WIG30 index. *Zeszyty Teoretyczne Rachunkowości*, 97 (153), 57-76. <https://doi.org/10.5604/01.3001.0012.0376>
- Krishnan, G., & Zhang, J. (2018). *Does mandatory adoption of IFRS enhance earnings quality? Evidence from closer to home*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3219059
- Lassaad, B. M. (2013). Communication about environmental information: What drives the effect on income smoothing as proxy of earnings quality? *Journal of Accounting & Marketing*, 2(1). <https://doi.org/10.4172/2168-9601.1000102>
- LeaseAccounting.com.(2017). *Leasing standard tax impact*. Retrieved from <https://leaseaccounting.com/leasing-standard-tax-impact/>
- Li, S., & Richie, N. (2009). *Income smoothin and the cost of debt*. Retrieved from. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1621760
- Lin, S.W.J., Riccardi, W., & Wang, C. (2017). *Relative effects of IFRS adoption and IFRS convergence on financial statement comparability*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2956076
- Liviu-Alexandru, T. (2018). The advantages that IFRS 16 brings to the economic environment. *Ovidius University Annals, Economic Sciences Series*, 18(1), 510-513.
- Mario, C., Lars, G., Gary, M., Baboukardos, D., & Cunningham, H. (2011). The impact of IFRS on reporting for business combinations. *Annals of the University of Oradea, Economic Science Series*, 20(1), 557-593.

- Marwood, F. (2017). The problem with IFRS 16 and why AI might be the answer - Deal Talk. Retrieved from <https://pwc.blogs.com/deals/2017/09/the-problem-with-ifs-16-and-why-ai-might-be-the-answer.html>
- Morales-Díaz, J., & Zamora-Ramírez, C. (2018). The impact of IFRS 16 on key financial ratios: a new methodological approach. *Accounting in Europe*, 15(1), 105-133.
- Mowery Schoenfeld. (2019). *IFRS consulting & conversion services, IFRS guidance*. Retrieved from <https://www.msllc.com/how-we-help/services/assurance/ifrs-consultation-conversion/>
- Mulford, C. W., & Comiskey, E. E. (2011). *The financial numbers game: Detecting creative accounting practices*. Hoboken, NJ: John Wiley & Sons.
- Mulyadi, M. (2012). IFRS adoption and taxation issue. *International Journal of Arts and Commerce*, 1(7), 159-165. Retrieved from https://www.researchgate.net/profile/Martin_Mulyadi/publication/275956438_IFRS_adoption_and_taxation_issue/links/5729bb3b08aef7c7e2c22653.pdf
- Natarajan, P., & Kuniparambil, M. A. (2019). *Accounting operating lease- A constructive capitalisation strategy*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3403422
- Nieken, P., & Sliwka, D. (2015). Management changes, reputation, and “big bath”-earnings management. *Journal of Economics & Management Strategy*, 24(3), 501-522. <https://doi.org/10.1111/jems.12101>
- Nonye S, A. (2019). IFRS and XBRL: Synergies for 21st century financial reporting. *International Journal for Innovative Research In Multidisciplinary Field*, 5(3), 256-253. Retrieved from https://www.researchgate.net/publication/333176445_IFRS_and_XBRL_Synergies_for_21_st_Century_Financial_Reporting
- Northcott, D., & Doolin, B. (2008). Qualitative research in accounting & management – the journey so far. *Qualitative Research in Accounting & Management*, 5(1), 5-10. <https://doi.org/10.1108/11766090810856732>
- Nurunnabi, M. (2019). Brexit and the Trump Era: The future of IFRS. *Business Horizons*, 62(3), 319-326. <https://doi.org/10.1016/j.bushor.2019.01.003>
- Obaidat, A. N. (2017). Income smoothing behavior at the times of political crises. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 7(2), 1-13. <https://doi.org/10.6007/ijarafms/v7-i2/2752>
- Okunbor, J. A., & Arowoshegbe, A. O. (2014). Stakeholders’ perception of the implementation of International Financial Reporting Standards (IFRS) in Nigeria. *Accounting and Finance Research*, 3(1), 67-72. <https://doi.org/10.5430/afr.v3n1p67>
- Omar, N., Rahman, R. A., Danbatta, B. L., & Sulaiman, S. (2014). Management disclosure and earnings management practices in reducing the implication risk. *Procedia - Social and Behavioral Sciences*, 145, 88-96. <https://doi.org/10.1016/j.sbspro.2014.06.014>
- Opore, S., Houqe, M. N., & Van Zijl, T. (2019). *Meta-analysis of the impact of adoption of IFRS on financial reporting comparability, market liquidity, and cost of capital*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3319067
- Plumlee, D., & Plumlee, M. A. (2010). *Assurance on XBRL for financial reporting*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1104245
- PWC. (2018). *In depth IFRS 16 implications for lessors in the real estate industry*. Retrieved from <https://www.pwc.com/gx/en/audit-services/ifrs/publications/ifrs-16/ifrs-16-implications-lessors-real-estate-industry.pdf>
- PWC. (2019). *IFRS 16: The leases standard is changing Are you ready?* Retrieved from <https://www.pwc.com/gx/en/services/audit-assurance/assets/ifrs-16-new-leases.pdf>
- PWCA. (2019). *In depth look at current financial reporting issues*. Retrieved from https://www.pwc.com/gx/en/audit-services/ifrs/publications/ifrs-16/impact_of_ifrs_on_other_standards.pdf
- Rahman, R., Sulaiman, S., Fadel, E., & Kazemian, S. (2016). Earnings management and fraudulent financial reporting: The Malaysian story. *Journal of Modern Accounting and Auditing*, 12(2), 91-101. <https://doi.org/10.17265/1548-6583/2016.02.003>

- Rodrigues Junior, M. M., Hein, N., Wilhelm, V. E., & Kroenke, A. (2015). Impact of convergence to IFRS on the economic and financial performance of construction and transportation enterprises: a study conducted through data envelopment analysis. *Applied Mathematical Sciences*, 9(91), 4499-4521. <https://doi.org/10.12988/ams.2015.53193>
- Rusmin, R., Scully, G., & Tower, G. (2012). Income smoothing behaviour by Asian transportation firms. *Managerial Auditing Journal*, 28(1), 23-44. <https://doi.org/10.1108/02686901311282489>
- Safdar, R., & Yan, C. (2016). Managing accruals for income smoothing: empirical evidence from Pakistan. *Journal of Accounting in Emerging Economies*, 6(4), 372-387. <https://doi.org/10.1108/jaee-07-2014-0038>
- Said, K. (2019). The impact of IFRS adoption on earnings management-Results from Canada. *Journal of Economics and Business*, 2(3). <https://doi.org/10.31014/aior.1992.02.03.107>
- Sari, E., Altintas, A. T., & Taş, N. (2016). The effect of the IFRS 16: Constructive capitalization of operating leases in the Turkish Retailing Sector. *Journal of Business, Economics and Finance*, 5(1), 2146-7943.
- Saucke, M. (2015). 3 Characteristics of Full IFRS and IFRS for SMEs adoption. In *Full IFRS and IFRS for SMEs Adoption by Private Firms*. Retrieved from <https://www.peterlang.com/view/9783653967128/Chapter03.html#ch3>
- Saucke, M. (2015). 4 determinants of full IFRS and IFRS for SMEs adoption. In *Full IFRS and IFRS for SMEs Adoption by Private Firms*. Retrieved from <https://www.peterlang.com/view/9783653967128/Chapter04.html#ch4>
- SEDL. (2015). *Methods for a Qualitative systematic review*. Retrieved from https://ktdrr.org/training/workshops/qual/session2/docs/session2_030415.pdf
- Segal, M., & Naik, G. (2019). The expected impact of the implementation of International Financial Reporting Standard (IFRS) 16–Leases. *Journal of Economic and Financial Sciences*, 12(1), 1-12.
- Shanszadeh, B., & Zolfaghari, N. (2015). Impact of efficacious internal controls on audit process: Auditors' perspective. *Review of Contemporary Business Research*, 4(2), 97-107. <https://doi.org/10.15640/rcbr.v4n2a8>
- Sieverding, A. (2018). *A critical analysis of the accounting for sale and lease back transactions under the new IFRS 16* (Doctoral dissertation). Portugal: Catholic University of Portugal.
- Silvia, M. (2016). *IFRS 16 Leases*. Retrieved from <https://www.youtube.com/watch?v=bv9gF69NJrE>
- Sreseli, N., Kharabadze, E., & Sreseli, R. (2016). *IFRS 16—challenges and some general aspects of new lease standard*. Retrieved from <http://eprints.tsu.ge/971/1/IFRS%2016%20%E2%80%93%20CHALLENGES%20AND%20SOME%20GENERAL%20ASPECTS%20OF%20NEW%20LEASE%20STANDARD.pdf>
- TMF Group. (2019). *IFRS 16 implementation across APAC has a major impact to company's financials, operations, key metrics and treasury strategy*. Retrieved from <https://www.tmf-group.com/en/news-insights/articles/2019/april/ifrs-16-implementation-across-apac/>
- Todorova, E. (2019). IFRS 16 leases and its impact on company's financial reporting, financial ratios and performance metrics. *Economic Alternatives*, (1), 44-62. Retrieved from https://www.unwe.bg/uploads/Alternatives/4_EA_1_2019_en.pdf
- Toumeh, A., & Yahya, S. (2019). A review of earnings management techniques: An IFRS perspective. *Global Business and Management Research: An International Journal*, 11(3), 1-13. Retrieved from http://www.gbmrjournal.com/pdf/vol.%2011%20no.%203/V11N3_1.pdf
- Trewavas, K., Botica R, N., & Laswad, F. (2012). The impact of IFRS adoption on public sector financial statements. *Australian Accounting Review*, 22(1), 86-102. <https://doi.org/10.1111/j.1835-2561.2011.00160.x>
- University of Sydney. (2019). *Subject guides: Systematic Reviews: Steps to Conduct a Systematic Review*. Retrieved from <https://libguides.library.usyd.edu.au/c.php?g=516278&p=4639255>
- Vardia, S., & Shiv L, P. (2019). Exploring stakeholders' perception about IFRS: An empirical study. *IUP Journal of Accounting Research & Audit Practices*, 18(1), 15-30.

- Wasiuzzaman, S., Sahafzadeh, I., & Rezaie, N. N. (2015). Prospect theory, industry characteristics and earnings management. *Review of Accounting and Finance*, 14(3), 324-347.
<https://doi.org/10.1108/raf-07-2014-0075>
- Wei O. (2019). *IFRS 16: How this new accounting standard will your stock investments*. Retrieved from <https://fifthperson.com/ifrs-16/>
- Wu, J. S., & Zhang, I. X. (2018). Mandatory IFRS adoption and the role of accounting earnings in CEO turnover. *Contemporary Accounting Research*, 36(1), 168-197.
<https://doi.org/10.1111/1911-3846.12428>
- Zhong, Y., & Li, W. (2016). Accounting conservatism: A literature review. *Australian Accounting Review*, 27(2), 195-213. <https://doi.org/10.1111/auar.12107>
- Zhou, D., & Habib, A. (2013). Accounting standards and earnings management: Evidence from China. *Accounting Perspectives*, 12(3), 213-236. <https://doi.org/10.1111/1911-3838.12016>
- Zhu, H., & Wu, H. (2011). Interoperability of XBRL financial statements in the U.S. In Lee In (Ed.), *Mobile Applications and Knowledge Advancements in E-Business*, 12in *E-Business* (p.129-144). Hershey, PA: IGI Global. Retrieved from <https://www.igi-global.com/chapter/interoperability-xbrl-financial-statements/68558>

This page intentionally left blank

APPENDIX A

RANGSIT JOURNAL OF SOCIAL SCIENCES AND HUMANITIES (RJSH)

ACKNOWLEDGEMENTS

The launch issue of the RANGSIT JOURNAL OF SOCIAL SCIENCES AND HUMANITIES (RJSH) would have been difficult without the assistance and efforts of many competent people who graciously lent their support. The Editor would like to thank all the reviewers who have given so generously of their time to assess manuscripts submitted to the Journal for the period July to December 2019. The Editor is grateful for their advice and for their promptness in dealing with the manuscripts. The following is a list of acknowledgements of those who offered expert counsel and guidance on a voluntary basis, reviewed manuscripts, contributed manuscripts, or provided other means of assistance.

The editorial staff are indebted for their kindness and commitment to the Journal and the academic profession. We gratefully appreciated their contributions.

Ancharee Chayanuvat, *Rangsit University, Thailand*
 Andrew-Peter Lian, *Suranaree University of Technology, Thailand*
 Anek Laothamatas, *Rangsit University, Thailand*
 Anuchat Pounsomlee, *Mahidol University, Thailand*
 Anusorn Tamajai, *Rangsit University, Thailand*
 Arnat Leemakdej, *Thammasat University, Thailand*
 Arthit Ourairat, *Rangsit University, Thailand*
 Attakrit Patchimnan, *Thammasat University, Thailand*
 Boonsri Cheevakumjorn, *Rangsit University, Thailand*
 Boontun Dothaisong, *Mahachulalongkornrajavidyalaya University, Thailand*
 Brian Gibson, *TOP Education Institute, Australia; Newcastle Business School, Australia*
 Bruce Weeks, *Rangsit University, Thailand*
 Carmine Bianchi, *University of Palermo, Italy*
 Chaiwat Kamchoo, *Chulalongkorn University, Thailand*
 Chaiyan Chaiyaphon, *Chulalongkorn University, Thailand*
 Chaiyosh Isavorapant, *Silpakorn University, Thailand*
 Charivat Santaputra, *Former Ambassador of Thailand to Germany*
 Chaiwat Meesantan, *Thammasat University, Thailand*
 Chartchai Trakulrunsi, *Rangsit University, Thailand*
 Charupol Rueangsuwan, *Royal Thai Armed Forces, Thailand*
 Chavanut Janekarn, *Thammasat University, Thailand*
 Chettha Sapyen, *Dhonburi Rajabhat University, Thailand*
 Chitriya Pinthong, *Rangsit University, Thailand*
 Chongnang Wiputhanupong, *Sripatum University, Thailand*
 Chutisant Kerdvibulvech, *Rangsit University, Thailand*
 Danu Phumalee, *Rangsit University, Thailand*
 Dararat Sukkaew, *Rajamangala University of Technology, Rattanakosin, Thailand*
 Direk Deeprasert, *Command and General Staff College, Thailand*
 Eakachart Joneurairatana, *Silpakorn University, Thailand*
 Edward Eddie Bacon, *Rangsit University, Thailand*
 Estelle Alma Maré, *Tshwane University of Technology, South Africa*
 Fumi Masuda, *Tokyo Zokei University, Japan*
 James Oakey, *University of Canterbury, New Zealand*
 Jamie Wallin, *The University of British Columbia*
 Jan Golembiewski, *The University of Sydney, Australia*

Janjira Sombatpoonsiri, *Thammasat University, Thailand*
Jaran Maluleem, *Thammasat University, Thailand*
Jirakorn Gajaseni, *Asian Disaster Preparedness Center, Thailand*
Jomdet Trimek, *Rangsit University, Thailand*
Jun Jiang, *Mahidol University, Thailand*
Kanda Wongwailikit, *Rangsit University, Thailand*
Kanitsorn Terdpaopong, *Rangsit University, Thailand*
Kanjanita Suchao-in, *Rangsit University, Thailand*
Korkiat Wuthijumnong, *Central Investigation Bureau, Thailand*
Kowit Pong-ngam, *Thammasat University, Thailand*
Krisanaphong Poothakool, *Rangsit University, Thailand*
Krisda Kerddee, *Rangsit University, Thailand*
Lalita Niphitprasart Soonthornvipart, *Kasetsart University, Thailand*
Lawan Hornopparat, *Sukhothai Thammathirat Open University, Thailand*
Lam Yan Yan, *Hong Kong Design Institute, Hong Kong, China*
Methawut Peerapornvitoon, *Thammasat University, Thailand*
Muhlis Madani, *Muhammadiyah University of Makassar, Indonesia*
Muhummad Salaebing, *Thaksin University, Thailand*
Nam Hoang, *University of New England, Australia*
Nares Pantaratorn, *Rangsit University, Thailand*
Narumon Pruegsasil, *Rangsit University, Thailand*
Narupol Chaiyot, *Rangsit University, Thailand*
Nirumon Rattanasat, *Thammasat University, Thailand*
Nimnuan Visedsun, *Rangsit University, Thailand*
Nitas Raiyawa, *Ministry of Public Health, Thailand*
Nongluk Chintanadilok, *Christian University of Thailand*
Noppadol Soonthornon, *Rangsit University, Thailand*
Normah Omar, *Universiti Teknologi MARA, Malaysia*
Nuchjaree Pichetkun, *Rajamangala University of Technology, Thanyaburi, Thailand*
Omar Al Farooque, *University of New England, Australia*
Onjaree Natakatoong, *Kasem Bundit University, Thailand*
Orlando Dela Cruz Canonoy, *Rangsit University, Thailand*
Pacharin Sumsiripong, *Mahidol University, Thailand*
Paul Joseph Bradley, *University of Thai Chamber of Commerce, Thailand*
Pawarisorn Somsin, *Rangsit University, Thailand*
Peeradorn Kaewlai, *Thammasat University, Thailand*
Peter Duff, *University of Aberdeen, UK*
Pirom Thantaworn, *Rangsit University, Thailand*
Pisrapai Sarasalin, *Rangsit University, Thailand*
Piyasuda Mawai, *Rangsit University, Thailand*
Pattanan Phechedchoo, *Dhurakij Pundit University, Thailand*
Polwat Lerskullawat, *Kasetsart University, Thailand*
Pongjan Yoopat, *Rangsit University, Thailand*
Ponn Virulrak, *Chulalongkorn University, Thailand*
Pornchai Tarkulwaranont, *Thammasat University, Thailand*
Pornsook Tantrarungroj, *Chulalongkorn University, Thailand*
Phaituraya Dassé, *Thammasat University, Thailand*
Prapaporn Chukumnerd, *Prince of Songkla University, Thailand*
Prapon Sahapattana, *National Institute of Development Administration, Thailand*
Praveen Nahar, *National Institute of Design, India*
Prayoon Tosanguan, *Rangsit University, Thailand*
Ponn Virulrak, *Chulalongkorn University, Thailand*

Pornchai Tarkulwaranont, *Thammasat University, Thailand*
 Rattaphong Sonsuphap, *Rangsit University, Thailand*
 Raymond Andrew Zepp, *Dewey International University, Cambodia*
 Romyen Kosaikanont, *Mae Fah Luang University, Thailand*
 Ruja Pholsward, *Rangsit University, Thailand*
 Rujira Sa-ngasang, *Eastern Asia University, Thailand*
 Sakon Varanyuwatana, *Thammasat University, Thailand*
 Sillapaporn Srijunpetch, *Thammasat University, Thailand*
 Siridech Kumsuprom, *Dhurakij Pundit University, Thailand*
 Somboon Suksamran, *Siam University, Thailand*
 Sompong Sanguanbun, *Rangsit University, Thailand*
 Sompong Sucharitkul, *Rangsit University, Thailand*
 Somsak Tambunlertchai, *Thammasat University, Thailand*
 Srisombat Chokprajakchat, *Mahidol University, Thailand*
 Sukanya Buranadechachai, *Burapha University, Thailand*
 Suphat Sukamolson, *Maejo University, Thailand*
 Sunee Kanyajit, *Mahidol University, Thailand*
 Supachai Kunaratanapruk, *Rangsit University, Thailand*
 Supasawad Chardchawarn, *Thammasat University, Thailand*
 Supawadee Sukeechep Moss, *Rajamangala University of Technology, Suvarnabhumi, Thailand*
 Suppakorn Poonyarith, *Mahidol University, Thailand*
 Surachai Sirikrai, *Thammasat University, Thailand*
 Surachart Bumrungsuk, *Chulalongkorn University, Thailand*
 Suraphol Srivithaya, *Rangsit University, Thailand*
 Surapong Jayanama, *Former Ambassador of Thailand to Vietnam, República Portuguesa, Greece, Germany, and Republic of South Africa*
 Surasit Thanadtang, *National Research Council of Thailand, Thailand*
 Sureeshine Phollawan, *Sripatum University, Thailand*
 Surichai Wankaew, *Chulalongkorn University, Thailand*
 Susumu Ueno, *Asia-Pacific Management Accounting Association, Japan*
 Sutham Cheurprakobkit, *Kennesaw State University, USA*
 Suthiphad Chirathaiwat, *International Institute for Trade and Development, Thailand*
 Teerana Bhongmakapat, *Chulalongkorn University, Thailand*
 Teerawat Wongkaew, *Ministry of Foreign Affairs, Thailand*
 Thanit Chindavanig, *Chulalongkorn University, Thailand*
 Thawatchai Suvanpanich, *Sukhothai Thammathirat, Thailand*
 Theera Nuchpam, *Chulalongkorn University, Thailand*
 Thira Chavarnakul, *Chulalongkorn University, Thailand*
 Thunyawat Chaitrakulchai, *Independent Scholar, Thailand*
 Todsanai Chumwatana, *Rangsit University, Thailand*
 Tomasz Wnuk-Pel, *University of Lodz, Poland*
 Varakorn Samakoses, *Dhurakij Pundit University, Thailand*
 Veerapong Boonyopas, *Chulalongkorn University, Thailand*
 Vichoke Mukdamanee, *Silpakorn University, Thailand*
 Vilawan Mangklatanakul, *Ministry of Foreign Affairs, Thailand*
 Visanu Vongsinsirikul, *Dhurakij Pundit University, Thailand*
 Visarut Phungsoondara, *Thammasat University, Thailand*
 Vorachai Sirikulchayanon, *Rangsit University, Thailand*
 Wael Musts-fa Faye Abuhasan, *Arab American University, Palestine*
 Wanpadej Hongthong, *Mahidol University, Thailand*
 Wararak Chalermputusak, *Sukhothai Thammathirat, Thailand*
 Wasan Luangprapat, *Thammasat University, Thailand*

Wichit Srisa-An, *Suranaree University of Technology, Thailand*
Witsanuphong Suksakhon, *Rangsit University, Thailand*
Worachat Churdchomjan, *Rangsit University, Thailand*
Yunlin Yang, *Rangsit University, Thailand*

APPENDIX B

RANGSIT JOURNAL OF SOCIAL SCIENCES AND HUMANITIES (RJSH)

NOTE FOR AUTHORS

1. Aims and Scope

Rangsit Journal of Social Sciences and Humanities (RJSH) is a multidisciplinary international scholarly journal that aims to provide a high profile vehicle for publication of various new issues in different academic areas. The scope of the *Journal* encompasses, but not limited to Interdisciplinary Studies in Humanities and Social Sciences, any of the following areas:

Arts & Design	Economics	Hotel Management	Music
Accounting	Education	International Studies	Risk Management
Business	Finance	Language	Social Innovation
Communications	Food and Food Catering	Law	Tourism
Corporate Risks and Corporate Governance	Fraud Investigations and Legal Aspects	Logistics	Public Policy
Criminal Justice Issues	History		

2. Submission Deadline

Submissions are to be permanently open. A manuscript submitted between July 1st and December 31st will be considered for publication in the January-June Issue of the subsequent year whereas a manuscript submitted between January 1st and June 30th will be considered for publication in the July-December Issue.

3. Categories of Articles

The *Journal* accepts the following types of articles:

1. **Research Articles:** A research article is a regular quantitative or qualitative article which aims to present new findings or interpretations.
2. **Notes or Address:** A brief record of something or speech written down that presents important issues.
3. **Review Articles:** There are two types of review articles: non-systematic (or journalistic) reviews and systematic reviews. Non-systematic or journalistic reviews provide a summary of evidence derived from primary studies that have been selected and synthesized according to the author's personal and professional perspective. Non-systematic reviews can cover a wide range of subject matter at various levels of totality and comprehensiveness. Systematic reviews, on the other hand, provide summaries of related primary studies that have been searched for, evaluated, and selected and reported according to a rigorous methodology.
4. **Innovations:** An innovation is an article which aims to present creative arts and designs, procedures or devices.
5. **Comments or Critiques:** A comment or critique is a short article that makes comments or replies to a comment on another article already published by this Journal.
6. **Book Reviews:** A book review is a short article that is written by a specialist and read by the general community. The aim of a book review is to give a brief summary of the book's strengths and weaknesses and to evaluate the book's overall usefulness to the audience it is intended for.

Research articles, review articles, and innovations should not exceed 15 pages of standard A4 paper using *RJSH* format. Notes, comments or critiques, and book review should not exceed 5 pages. Template for research articles is available at <https://rjsh.rsu.ac.th>. All categories of articles must coincide with manuscript preparation instruction (see Manuscript Preparation Section).

4. Editorial Policies

RJSH accepts only the work that has not been published; that is not under consideration for publication, elsewhere; and that its publication has been approved by all co-authors and the relevant authorities responsible at the institute where the work was conducted. Submission also implies that the authors have already obtained all necessary permissions for the inclusion of copyrighted materials, such as figures and tables from other publications. Previously published work will not be considered for publication. Submitting a copied piece of writing as one's own original work is considered plagiarism. The *Journal* is published by Rangsit University Press, Thailand. Contributions are in English. Copyright is by the publisher and the authors.

Authorship: *RJSH* expects that all of the authors listed on a manuscript have contributed substantially to the submitted paper. By submission of the manuscript, cover letter, and Copyright Transfer Agreement (CTA), the corresponding author affirms that all named authors have agreed to be listed as authors of the paper. Furthermore, by their signatures on the CTA, all authors affirm that they have both read and approved the manuscript, and that they take full responsibility for the content of the article.

Review Process: *RJSH* assumes responsibility for insuring that submitted manuscripts receive expert and unbiased reviews. *RJSH* strives to complete a peer review of all submitted papers and the publication of accepted manuscripts in a timely manner and to keep the authors informed of any problems with their manuscript. All submitted manuscripts are initially evaluated by the Editor-in-Chief in consultation with members of the Editorial Board before being sent for double-blind review. *RJSH* is under no obligation to submit every manuscript to formal peer review. Manuscripts that are judged by the editors to be inferior or inappropriate for publication in the *Journal* may, at the discretion of the Editor-in-Chief, be rejected without formal written reviews by referees. *RJSH* attempts to obtain at least two written reviews for each manuscript that is entered into the peer review process, although the Editor-in-Chief has the discretion to make final decisions about the disposition of a manuscript with fewer than two reviews. The reviewers' evaluations will be used by the editors to decide whether the paper should be accepted, revised or rejected. A copy of the referees' comments will be sent to the corresponding authors whose paper needs revision. All reviewers serve anonymously and their identities are protected by the confidentiality policy of *RJSH*.

Confidentiality: As is customary for the peer review process, *RJSH* holds the identity of authors and the contents of all submitted manuscripts in confidence until such time as the papers are published. This confidentiality extends to the comments of editors and reviewers that have evaluated the paper; these comments and reviews are released only to the corresponding author. Co-authors may have access to these documents either by obtaining them directly from the corresponding author or by submitting to *RJSH* a letter of request that has been signed by the corresponding author. Similarly, *RJSH* expects that editors and reviewers will maintain strict confidentiality of the authors' identities and the contents of manuscripts that they examine during the review process, and furthermore, will never disclose the contents (either orally or in writing) of documents related to the peer review of a manuscript. A violation of this policy is considered a serious breach of trust.

Research Involving Animals or Humans: Authors must state in the manuscript that the work was approved by, at least, their institutional ethical review board for any research involving human and animal subjects. These approvals are required for publication in *RJSH*.

5. Manuscript Preparation

General Instruction: Submit your manuscript in both PDF and MS word formats. Manuscripts are acceptable in both US and UK English, but the use of either must be consistent throughout the manuscript. Please note that the editors reserve the right to adjust style to certain standards of uniformity.

Format: Unless specified, type text with 10-point Times New Roman font on 12-point line spacing, with a 1.25 inch left margin, 1 inch bottom and right margin, 2 inch top margin, 1.2 inch header, and 0.6 inch footer. Main text is set in single column. First lines of paragraphs are indented 0.5 inch. For hard copy, use standard A4 paper, one side only. Use ordinary upper- and lower-case letters throughout, except where italics are required. For titles, section headings and subheadings, tables, figure captions, and authors' names in the text and reference list: use ordinary upper- and lower-case letters throughout. Start headings at the left margin.

If you wish, you may indicate ranking of complicated section headings and subheadings with numerals (1, 1.1, 1.1.1). Try not to exceed three ranks. All pages must be numbered in the top right-hand corner.

Title: Use 11-point bold font on 12-point line spacing. The length of the title of the article must not exceed 2 lines. A title should be concise and informative. The alignment of the title is centered.

Author Names: Use 10-point font on 11-point line spacing. Centered alignment and leave one line space below the title of the article. Begin with the first name of the author followed by the last name. For more than one author, separate each name by a comma (,), and identify each author's affiliation by superscript numbers at the end of the author's last name.

Author Affiliations: Use 9-point font on 10-point line spacing. Centered alignment and leave one line space below the author names. Include institutional and e-mail addresses for all authors. Place superscript numbers at the beginning of each affiliation accordingly.

Abstract: Use 10-point font on 11-point line spacing for heading and 9-point font on 11-point line spacing for abstract content. An abstract of up to 250 words must be included as and when appropriate. For research papers; the purpose and setting of the research, the principal findings and major conclusions, and the paper's contribution to knowledge should be briefly stated. For empirical papers the locations of the study should be clearly stated, as should the methods and nature of the sample, and a summary of the findings and conclusion. Please note that excessive statistical details should be avoided, abbreviations/acronyms used only if essential or firmly established.

Keywords: List up to 6 keywords and separate each keyword by a comma (,). The keywords should accurately reflect the content of the article. The keywords will be used for indexing purposes.

Main Text: Use 10-point font on 12-point line spacing. In the main body of the submitted manuscript the following order should be adhered to: introduction, methodology, results (if any), discussion (if any), conclusion, acknowledgements, and references. Please note that some article categories may not contain all components above. Tables or figures must be included in the text for the reviewing process. In addition, tables and figures must also be submitted individually in separate files. Refer in the text to each table or illustration included, and cite them in numerical order, checking before submission that all are cited and in correct sequence.

References in the Text: To insert a citation in the text use the author-year system, i.e., the author's last name and year of publication. Examples are as follows: "Since Johnson (2008) has shown that..." or "This is in agreement with results obtained later (Benjamin, 2010)". For 2-3 authors; all authors are to be listed, with "and" separating the last two authors, for more than three authors, list the first author followed by et al. The list of references should be arranged alphabetically by authors' names. All publications cited in the text should be presented in a list of references following the text of the manuscript. The manuscript should be carefully checked to ensure that the spelling of authors' names and dates are exactly the same in the text as in the reference list. Responsibility for the accuracy of bibliographic citations lies entirely with the author(s). Citation of a reference as "in press" implies that the item has been accepted for publication. Authors are responsible for the accuracy of the content of the references.

List of References: RJSH uses the American Psychological Association (APA) referencing style, details of which can be found at <http://www.apastyle.org/>. References should be listed at the end of article, arranged alphabetically according to the last names of the authors and then chronologically. The following are examples of the APA referencing style:

Abstracts

Author./ (Year of publication)./Title of Abstract (abstract)./Journal Title,/Volume(Issue),/Page number.

Example:

Clark, D. V., Hausen, P. H., & Mammen, M. P. (2002). Impact of dengue in Thailand at the family and population levels (abstract). *Am J Trop Med Hyg*, 67(2 Suppl), 239.

Books

Author./ (Year of publication)./ *Book Title:/Capital letter also for subtitle./* Edition (if any)./ Location:/ Publisher.

Example:

Calfee, R. C., & Valencia, R. R. (1991). *APA guide to preparing manuscripts for journal publication*. Washington, DC: American Psychological Association.

Article or Chapter in an Edited Book

Author./ (Year of publication)./ Title of chapter./ In/ Editor/ (Ed.)./ *Book Title/* (pages of chapter)./ Location:/ Publisher.

Example:

O'Neil, J. M., & Egan, J. (1992). Men's and women's gender role journeys: A metaphor for healing, transition, and transformation. In B. R. Wainrib (Ed.), *Gender issues across the life cycle* (pp. 107-123). New York, NY: Springer.

Conference and Seminar Proceedings

To cite proceedings that are published regularly, use the same format as for a journal article. To cite proceedings that are published in book form, use the same format as for an article in a book.

Dissertation or Thesis

Author./ (Year of publication)./ *Title of dissertation or thesis* / (Doctoral dissertation or Master's thesis)./ Awarding Institution.

Example:

Norasingha, A. (2009). *Expression and distribution of mucorinic receptors in hepatic composite of the cirrhotic rat* (Master's thesis). Rangsit University, Pathum Thani.

Editorials

Author./ (Year of publication)./ Title of Editorial (editorial)./ *Journal Title,* Volume(Issue),/ Page numbers.

Example:

Fisher, R. I. (2003). Immunotherapy in Non-Hodgkin's lymphoma: Treatment advances (editorial). *Semin Oncol*, 30(2Suppl 4), 1-2.

Journal Articles

Author./ (Year of publication)./ Article Title./ *Journal Title,* Volume(Issue),/ Page numbers.

Example:

Leelawat, S., Leelawat, K., Narong, S., & Matangkasombut, O. (2010). The dual effects of delta 9-tetrahydrocannabinol on cholangiocarcinoma cells: Anti-invasion activity at low concentration and apoptosis induction at high concentration. *Cancer Investigation*, 28(4), 357-363.

Polk, A., Amsden, B., Scarrrt, D., Gonzal, A., Oknamefe, O., & Goosen, M. (1994). Oral delivery in aquaculture. *Aquacult. Eng*, 13, 311-323.

Seals, D. R., & Tanaka, H. (2000). Manuscript peer review: A helpful checklist for students and novice referees. *Advances in Physiology Education*, 23(1), 52-58.

Srichandum, S., & Rujiranyong, T. (2010). Production scheduling for dispatching ready mixed concrete trucks using bee colony optimization. *American J. of Engineering and Applied Sciences*, 3(1), 823-830.

Letters

Author./ (Year of publication)./ Title of Letter./ *Journal Title,* Volume(Issue),/ Page number.

Example:

Enzensberger, W., & Fisher, P.A. (1996). Metronome in Parkinson's disease (letter). *Lancet*, 347, 1337.

Notes

Author./ (Year of publication)./ Title of Note./ *Journal Title,* Volume(Issue),/ Page number.

Example:

Haier, R. J., Schroeder, D.H., Tang, C., Head, K., & Colom, R. (2010). Gray matter correlates of cognitive ability tests used for vocational guidance. *Biomed Central*, 3, 206.

Unpublished/In Press Articles

Author./ (In press Year)./Article Title./*Journal Title*./ (in press).

Example:

Veena, B. (2004). Economic pursuits and strategies of survival among Damor of Rajasthan. *J Hum Ecol.* (in press).

Internet periodicals

Author./ (Year of publication)./Article Title./*Journal Title*./Volume(issue)./ page numbers./Retrieved mm dd, year, from the full URL of the web page

Example:

Adams, P. J. (2000). Australian economic history. *Journal of Australian Economics*, 5(2), 117-132.
Retrieved June 12, 2001, from <http://jae.org/articles.html>

Internet non-periodicals

Author./ (Year of publication)./Article Title./Retrieved mm dd, year, from the full URL of the web page

Example:

Lemire, D. (n.d.). Write good papers. Retrieved July 1, 2010, from <http://www.daniel-lemire.com/blog/rules-to-write-a-good-research-paper>

Illustrations and Figures: All illustrations should be provided in a file format and resolution suitable for reproduction, e.g., EPS, JPEG or TIFF formats, without retouching. Photographs, charts and diagrams should be referred to as "Figure(s)" and should be numbered consecutively in the order to which they are referred. In addition to placing figures with figure captions into the main text, **submit each figure individually as a separate file.**

Line Drawings: All lettering, graph lines and points on graphs should be sufficiently large and bold to permit reproduction when the diagram has been reduced to a size suitable for inclusion in the journal. Do not use any type of shading on computer-generated illustrations.

Figure Captions: Type figure captions using 9-point font on 10-point line spacing. Insert figures with figure captions into the main text (see **Illustrations and figures** Section). Type as follows: Figure 1 Caption

Color: Where printed color figures are required, the author will be charged at the current color printing costs. All color illustrations will appear in color online, at no cost. Please note that because of technical complications which can arise when converting color figures to grayscale, for the printed version should authors not opt for color in print, please submit in addition usable black and white versions of all the color illustrations.

Tables: Tables must be cell-based without vertical lines. They should be produced in a spreadsheet program such as Microsoft Excel or in Microsoft Word. Type all text in tables using 9-point font or less. Type the caption above the table to the same width as the table. Insert tables and table captions into the main text. Tables should be numbered consecutively. Footnotes to tables should be typed below the table and should be referred to by superscript numbers. Submit separate files of tables in their original file format and not as graphic files in addition to incorporating in the main text. Tables should not duplicate results presented elsewhere in the manuscript (e.g., in graphs).

Proofs: Proofs will be sent to the corresponding author by PDF wherever possible and should be returned within 1 week of receipt, preferably by e-mail. Corrections must be restricted to typesetting errors. It is important to ensure that all of your corrections are returned to us in one all-inclusive e-mail or fax. Proofreading is solely the responsibility of the author(s). Note that *RJSH* may proceed with the publication of your article if no response is received in time.

Reprints: Authors will receive free copy of the journal in which their work appears.

English Language Editing before Submission: Authors for whom English is a second language may choose to have their manuscript professionally edited before submission.

6. Manuscript Submission

Manuscripts should be submitted electronically to the Editor-in-Chief as an attachment via the RJSH submission system, in word processing format. The *RJSH* submission form must be completed. Included in the submission form are: (a) the title and authors, (b) complete contact information for the corresponding author (mailing address, e-mail address, and telephone and fax numbers), (c) confirmation of the originality of the reported work, (d) approval of the submitted version of the manuscript by all authors, and (e) the authors' consent for publication in *RJSH*, if accepted. The submission form is available at <https://rjsh.rsu.ac.th>.

7. Manuscript Revision and Re-submission

There are four editorial decisions: Accept, Accept with Minor Revision, Resubmit with Major Revision, and Reject. A Reject decision is definitive and authors may not submit a new version of the manuscript to the *RJSH*. A Resubmit with Major Revision requires a major re-write of the manuscript and/or inclusion of significant new data, and thus the creation of a new manuscript, which will thus be assigned a new submission date. An Accept with Minor Revision decision implies that the paper can, in principle, attain the required standard of the *Journal* without major change. Editors may or may not have a revised manuscript reviewed (generally, by the original reviewers), in order to ascertain whether changes to the original manuscript adequately responded to the criticisms. If changes made do not result in a paper of the required standard, the revised manuscript will be definitively rejected. If a revised manuscript of "Accept with Minor Revision" is accepted, the original submission date will be retained.

8. Copyright Agreement

Once a manuscript is accepted for publication, authors will be required to sign a Copyright Transfer Agreement form (CTA). CTA is available at <https://rjsh.rsu.ac.th>. Signature of the CTA is a condition of publication and papers will not be passed for production unless a signed form has been received. Please note that signature of the Copyright Transfer Agreement does not affect ownership of copyright in the material. Please submit the completed form with the final version of the manuscript back to the *RJSH* submission system.

9. Further Reading

The following resources will provide valuable guidelines for the preparation of manuscripts.

Anonymous. (n.d.). How to write abstract. Retrieved January 17, 2011, from

http://www.journal.au.edu/au techno/2006/jan06/vol9num3_howto.pdf

Anonymous. (n.d.). How to write an abstract: Links and tips. Retrieved January 17, 2011, from

<http://research.berkeley.edu/ucday/abstract.html>

Koopman, P. (n.d.). How to write an abstract. Retrieved January 17, 2011, from

<http://www.ece.cmu.edu/~koopman/essays/abstract.html>

Lemire, D. (n.d.). Write good papers. Retrieved January 17, 2011, from <http://lemire.me/blog/rules-to-write-a-good-research-paper/>

Plonsky, M. (n.d.). Psychology with style: A hypertext writing guide. Retrieved January 17, 2011, from <http://www.uwsp.edu/psych/apa4b.htm>

Seals, D. R., & Tanaka, H. (2000). Manuscript peer review: A helpful checklist for students and novice referees. *Advances in Physiology Education*, 23(1), 52-58.

Jones, A., & Pham, H. (n.d.). Basic Referencing using the APA System, Teaching and learning unit, Faculty of Economics and Commerce, The University of Melbourne. Retrieved February 15, 2011, from <http://www.scribd.com/doc/57603066/A-Pa-Style>

APPENDIX C

RANGSIT JOURNAL OF SOCIAL SCIENCES AND HUMANITIES (RJSH)

Research Article Single-Column Template

Please note that the paper size is standard A4 size (approx 8.27 x 11.69 in)

**Type your title here using 11-point Times New Roman bold font on 12-point line spacing.
The length of the title of the article must not exceed 2 lines.**

Author Names (Use 10-point Times New Roman font on 11-point line spacing.

Begin with the first name of the author followed by the last name. For more than one author, type 'and' before the last author's name. For more than two authors, also separate each name by a comma (,).

Identify each author's affiliation by superscript numbers at the end of the author's last name.)

Author Affiliations (Use 9-point Times New Roman font on 10-point line spacing.

Include institutional and e-mail addresses for all authors. Place superscript number in front of author's affiliation corresponding to author's name.)

Received date month year / Revised date month year / Accepted date month year / Publish Online date month year

Abstract (10-point bold font on 11-point line spacing)

For abstract content, use 9-point Times New Roman font on 11-point line spacing. First line is indented 0.5 inch. An abstract of up to 250 words must be included. Include your major findings in a useful and concise manner. Include a problem statement, objectives, brief methods, results, and the significance of your findings.

Keywords: List up to 6 keywords and separate each keyword by a comma (,). The keywords should accurately reflect the content of the article. The keywords will be used for indexing purposes.

1. Introduction

The actual manuscript will be published in a single-column style in the RJSH journal. This single column template is adopted as a user friendly format. Thus, with this template, the main text is set in a single column. Type text with 10 point Times New Roman font on 12 point line spacing, with a 1.25 inch left margin, 1 inch bottom and right margin, 2 inch top margin, 1.2 inch header, and 0.6 inch footer. First lines of paragraphs are indented 0.5 inch. Please note that the paper size is standard A4 size (approx 8.27 x 11.69 in). In MS Word, select "Page Layout" from the menu bar, and under Paper Size select A4 Size.

The introduction should put the focus of the manuscript into a broader context. As you compose the introduction, think of readers who are not experts in this field. Include a brief review of the key literature. If there are relevant controversies or disagreements in the field, they should be mentioned so that a non-expert reader can find out about these issues further. The introduction should conclude with a brief statement of the overall aim of the experiments.

To insert a citation in the text use the author-year system, i.e., the author's last name and year of publication. Examples are as follows: "Since Johnson (2008) has shown that..." or "This is in agreement with results obtained later (Benjamin, 2010)". For 2-3 authors; all authors are to be listed, with "and" separating the last two authors, for more than three authors, list the first author followed by et al. The list of references should be arranged alphabetically by authors' names. All publications cited in the text should be presented in a list of references following the text of the manuscript. The manuscript should be carefully checked to ensure that the spelling of authors' names and dates are exactly the same in the text as in the reference list. Responsibility for the accuracy of bibliographic citations lies entirely with the author(s). Citation of a reference as "in press" implies that the item has been accepted for publication. Authors are responsible for the accuracy of the content of the references.

2. Objectives

The objectives of the study should be specified explicitly.

3. Materials and Methods

This section should provide enough detail to allow full replication of the study by suitably skilled investigators. Protocols for new methods should be included, but well-established protocols may simply be referenced.

4. Results

The results section should provide details of all of the experiments that are required to support the conclusions of the paper. There is no specific word limit for this section. The section may be divided into subsections, each with a concise subheading. The results section should be written in past tense.

Tables must be cell-based without vertical lines. They should be produced in a spreadsheet program such as Microsoft Excel or in Microsoft Word. Type all text in tables using 9-point font on 10-points line spacing. Type the caption above the table to the same width as the table.

Tables should be numbered consecutively. Footnotes to tables should be typed below the table and should be referred to by superscript numbers. Submit separate files of tables in their original file format and not as graphic files in addition to incorporating in the main text. Tables should not duplicate results presented elsewhere in the manuscript (e.g., in graphs).

Table 1 Table caption

C1	C2	C3	C4
R1			
R2			
R3			
R4			
R5			
R6			

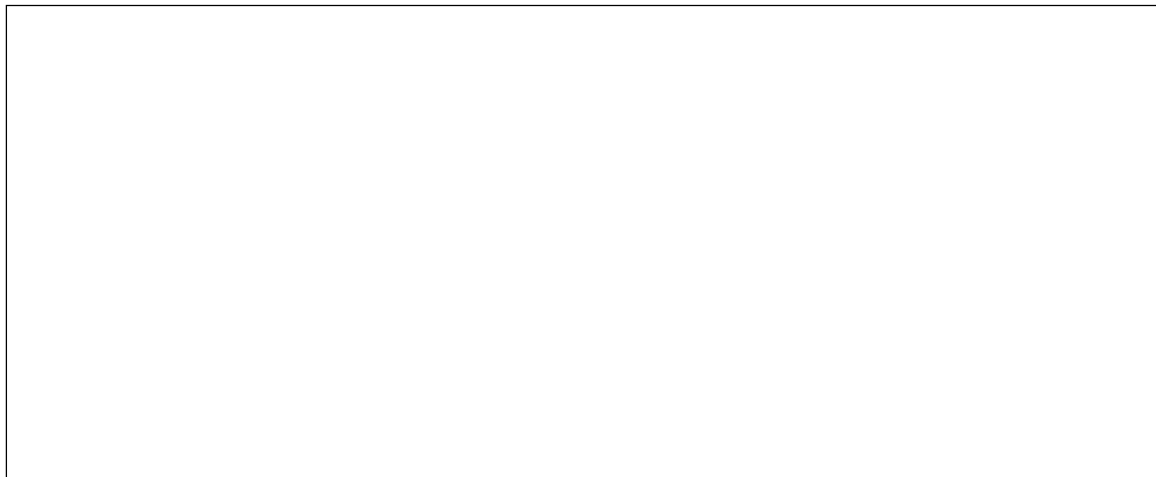
If figures are inserted into the main text, type figure captions below the figure. In addition, submit each figure individually as a separate file. Figures should be provided in a file format and resolution suitable for reproduction, e.g., EPS, JPEG or TIFF formats, without retouching. Photographs, charts and diagrams should be referred to as "Figure(s)" and should be numbered consecutively in the order to which they are referred



Figure 1 Figure caption

Table 2 Table caption

C1	C2	C3	C4	C5	C6	C7
R1						
R2						
R3						
R4						
R5						
R6						
R7						
R8						
R9						
R10						

**Figure 2** Figure caption

5. Discussion

The discussion should spell out the major conclusions of the work along with some explanation or speculation on the significance of these conclusions. How do the conclusions affect the existing assumptions and models in the field? How can future research build on these observations? What are the key experiments that must be done? The discussion should be concise and tightly argued. Conclusions firmly established by the presented data, hypotheses supported by the presented data, and speculations suggested by the presented data should be clearly identified as such. The results and discussion may be combined into one section, if desired.

6. Conclusion

The Conclusion section restates the major findings and suggests further research.

7. Acknowledgements

People who contributed to the work but do not fit criteria for authorship should be listed in the Acknowledgments, along with their contributions. It is the authors' responsibility to ensure that anyone named in the acknowledgments agrees to being so named. The funding sources that have supported the work should be included in the acknowledgments.

8. References

RJSH uses the American Psychological Association (APA) referencing style, details of which can be found at <http://www.apastyle.org/>. References are arranged alphabetically according to the last names of the authors and then chronologically. The first line of each reference is aligned left. Use hanging style of 0.5 inch after the first line of each reference. The following are examples of the APA referencing style:

Abstracts

Author./ (Year of publication)./ Title of Abstract (abstract)./ *Journal Title*,/ Volume(Issue),/ Page number.

Example:

Clark, D. V., Hausen, P. H., & Mammen, M. P. (2002). Impact of dengue in Thailand at the family and population levels (abstract). *Am J Trop Med Hyg*, 67(2 Suppl), 239.

Books

Author./ (Year of publication)./ *Book Title*:/ *Capital letter also for subtitle*./ Edition (if any)./ Location:/ Publisher.

Example:

Calfee, R. C., & Valencia, R. R. (1991). *APA guide to preparing manuscripts for journal publication*. Washington, DC: American Psychological Association.

Article or Chapter in an Edited Book

Author./ (Year of publication)./ Title of chapter./ In/ Editor/(Ed.),/ *Book Title*/(pages of chapter)./ Location:/ Publisher.

Example:

O'Neil, J. M., & Egan, J. (1992). Men's and women's gender role journeys: A metaphor for healing, transition, and transformation. In B. R. Wainrib (Ed.), *Gender issues across the life cycle* (pp. 107-123). New York, NY: Springer.

Conference and Seminar Proceedings

To cite proceedings that are published regularly, use the same format as for a journal article. To cite proceedings that are published in book form, use the same format as for an article in a book.

Dissertation or Thesis

Author./ (Year of publication)./ *Title of dissertation or thesis* /(Doctoral dissertation or Master's thesis)./ Awarding Institution.

Example:

Norasingha, A. (2009). *Expression and distribution of mucorinic receptors in hepatic composite of the cirrhotic rat* (Master's thesis). Rangsit University, Pathum Thani.

Editorials

Author./ (Year of publication)./ Title of Editorial (editorial)./ *Journal Title*,/ Volume(Issue),/ Page numbers.

Example:

Fisher, R. I. (2003). Immunotherapy in Non-Hodgkin's lymphoma: Treatment advances (editorial). *Semin Oncol*, 30(2Suppl 4), 1-2.

Journal Articles

Author./ (Year of publication)./ Article Title./ *Journal Title*,/ Volume(Issue),/ Page numbers.

Example:

Leelawat, S., Leelawat, K., Narong, S., & Matangkasombut, O. (2010). The dual effects of delta 9-tetrahydrocannabinol on cholangiocarcinoma cells: Anti-invasion activity at low concentration and apoptosis induction at high concentration. *Cancer Investigation*, 28(4), 357-363.

Polk, A., Amsden, B., Scarrott, D., Gonzal, A., Oknamefe, O., & Goosen, M. (1994). Oral delivery in aquaculture. *Aquacult. Eng*, 13, 311-323.

- Seals, D. R., & Tanaka, H. (2000). Manuscript peer review: A helpful checklist for students and novice referees. *Advances in Physiology Education*, 23(1), 52-58.
- Srichandum, S. & Rujirayanyong, T. (2010). Production scheduling for dispatching ready mixed concrete trucks using bee colony optimization. *American J. of Engineering and Applied Sciences*, 3(1), 823-830.

Letters

Author./ (Year of publication)./ Title of Letter./ *Journal Title*./ Volume(Issue),/ Page number.

Example:

Enzensberger, W., & Fisher, P. A. (1996). Metronome in Parkinson's disease (letter). *Lancet*, 347, 1337.

Notes

Author./ (Year of publication)./ Title of Note./ *Journal Title*./ Volume(Issue),/ Page number.

Example:

Haier, R. J., Schroeder, D. H., Tang, C., Head, K., & Colom, R. (2010). Gray matter correlates of cognitive ability tests used for vocational guidance. *Biomed Central*, 3, 206.

Unpublished/In Press Articles

Author./ (In press Year)./ Article Title./ *Journal Title*./ (in press).

Example:

Veena, B. (2004). Economic pursuits and strategies of survival among Damor of Rajasthan. *J Hum Ecol.* (in press).

Internet periodicals

Author./ (Year of publication)./ Article Title./ *Journal Title*./ Volume(issue),/ page numbers./ Retrieved mm dd, year, from the full URL of the web page

Example:

Adams, P. J. (2000). Australian economic history. *Journal of Australian Economics*, 5(2), 117-132.
Retrieved June 12, 2001, from <http://jae.org/articles.html>

Internet non-periodicals

Author./ (Year of publication)./ Article Title./ Retrieved mm dd, year, from the full URL of the web page

Example:

Lemire, D. (n.d.). Write good papers. Retrieved July 1, 2010, from <http://www.daniel-lemire.com/blog/rules-to-write-a-good-research-paper>

APPENDIX D

RANGSIT JOURNAL OF SOCIAL SCIENCES AND HUMANITIES (RJSH) MANUSCRIPT SUBMISSION FORM

Type of submitted article: [Mark (✓) the appropriate choice]

☐ Research article

☐ Note

☐ Comment/Critique

☐ Review article

☐ Innovation

☐ Book Review

Section 1: Instructions. A copy of this form, with signatures included from ALL authors on the manuscript, must accompany every new manuscript submission before it will be considered for publication. Please fully complete to eliminate delays in submission. Use an additional form if there are more than 7 authors. Please scan this completed form and attach it electronically during the submission process.

Section 2: Manuscript Information.

Manuscript Code: (To be assigned by RJSH)

Manuscript Title: _____

All author names (in order of appearance on the manuscript title page):

Corresponding author name & contact information: _____

Section 3: Acknowledgments. By signing below, I acknowledge my acceptance to and/or certification of the following information:

•Approval of the Submitted Work and Acknowledgment of Role of Corresponding Author: I have personally reviewed and given final approval of the version submitted, and with the exception of previously published work or data which is clearly acknowledged in the manuscript and for which appropriate written permission is included as part of the submission, to my knowledge, neither the manuscript nor its data have been previously published (except in abstract) or are currently under consideration for publication by any other publication. I agree that the corresponding author (named above) shall be the sole correspondent with the Editorial Office on all matters related to this submission. In the event of acceptance, I designate the corresponding author as the responsible party for all communications with the journal's publisher related to this work, including review and correction of the typeset proof. I understand that once a manuscript is submitted, no substantial changes to the content will be allowed.

•Authorship Contribution: I have participated sufficiently in the work to take public responsibility for all or part of the content, and have made substantive intellectual contributions to the submitted work in the form of: 1) conception and design, and/or acquisition of data, and/or analysis of data; and 2) drafting the article, and/or revising it critically for important intellectual content. I have identified all persons, and their employer(s), that have contributed or have substantively edited the submitted work.

•Conflict of Interest, Disclosures, Financial, and Material Support: To my knowledge, all of my possible conflicts of interest and those of my co-authors, financial or otherwise, including direct or indirect financial or personal relationships, interests, and affiliations, whether or not directly related to the subject of the paper, are listed in the appropriate sections of this manuscript. Disclosure includes, but is not limited to, grants or research funding, employment, affiliations, patents (in preparation, filed, or granted), inventions, speakers' bureaus, honoraria, consultancies, royalties, stock options/ownership, or expert testimony. If an author has no conflicts of interest to declare, this must be explicitly stated.

•Transfer of Copyright: I agree to transfer copyright to *RJSH* upon acceptance of this submission for publication in the *Journal*. I authorize the corresponding author to sign the Journal Publishing Agreement on my behalf.

Author Name (Printed)	Author Signature	Date
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____

APPENDIX E

RANGSIT JOURNAL OF SOCIAL SCIENCES AND HUMANITIES (RJSH) Copyright Transfer Agreement (CTA)

In order to protect the work against unauthorized use and to authorize dissemination of the work by means of offprints, reprints, legitimate photocopies, microform editions, translation, document delivery, and secondary information sources such as abstracting and indexing services including data bases, it is necessary for the author(s) to transfer the copyright in a formal written manner.

The **Consent** ensures that the Publisher has the author's permission to publish the work.

Title of Article

Author(s)

Corresponding Author

1. The Author hereby assigns to the Publisher the copyright to the work named above whereby the Publisher shall have the exclusive right to publish the said article in print and in electronic form.
2. The Author guarantees that the work is original, has not been published previously, is not under consideration for publication elsewhere, that it contains nothing libelous, that all statements therein purporting to be facts are true and that any formula or instruction contained therein will not, if followed accurately, cause any injury, illness or damage to the user, that the work is in no way whatever a violation or infringement of any existing copyright or license, or duty of confidentiality, or duty to respect to privacy, or any other right of any person or party whatsoever and that any necessary permission to quote from another source has been obtained.
3. The Author declares that any person named as co-author of the work is aware of the fact and has agreed to being so named.
4. The Author declares that, if the CTA form has been downloaded from the Publisher's website or sent by e-mail, the form has not been changed in any way without the knowledge of the Publisher.

To be signed by the corresponding author on behalf of all co-authors.

Signature _____

Name (Print) _____

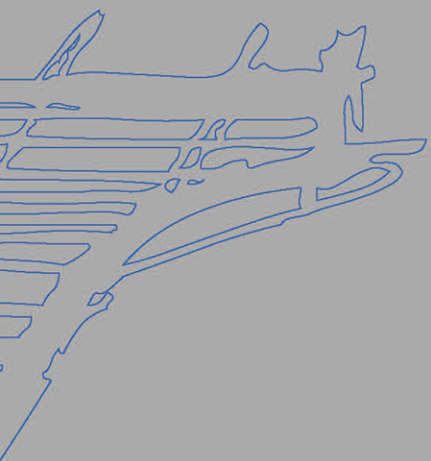
Date _____

Please submit this signed form promptly to *RJSH* submission system. Thank you.

RJSH Editorial Office :

Rangsit University Research Institute, Rangsit University
52/347 Paholyotin Road, Pathum Thani 12000, Thailand
Phone + 66 (0) 2 997 2222 ext. 1074, E-mail: rjsh@rsu.ac.th

This page intentionally left blank



<https://rjsh.rsu.ac.th>