รูปแบบการศึกษาที่ส่งผลต่อความสำเร็จของนักศึกษาปริญญาตรีหลักสูตรนานาชาติในประเทศไทย

EDUCATIONAL MODEL OF THE FAXTORS AFFECTING THE ACHIEVEMENT OF INTERNATIONAL UNDERGRADUATE STUDENT IN THAILAND

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บทคัดย่อ

การศึกษาระดับปริญญาตรีในหลักสูตรนานาชาติอาจเป็นหนทางหนึ่งที่ช่วยตอบสนองความต้องการ
ด้านความมั่นคงของผู้บริโภค วรรณกรรมที่เกี่ยวข้องกล่าวว่าอาจมีหลายปัจจัยที่มีอิทธิพลต่อความสำเร็จ
ด้านการศึกษาของนักศึกษาในหลักสูตรนานาชาติ ในประเทศไทย อาทิสมรรถนะทางด้านวิชาการและด้าน
ภาคปฏิบัติของนักศึกษา วิถีการดำเนินชีวิต พฤติกรรมการใช้สื่อสังคมออนไลน์และการเอาใจใส่ดูแลแบบ
เฉพาะสำหรับนักศึกษานานาชาติ แต่ยังคงมีการศึกษาจำนวนน้อยที่ศึกษาความสัมพันธ์ของปัจจัยเหล่านี้
ในกรอบแนวคิดเดียวกัน หรืออาจเรียกได้ว่า เป็นรูปแบบการศึกษาของตัวแปรที่ส่งผลต่อความสำเร็จ
ของนักศึกษานานาชาติในประเทศไทย งานวิจัยนี้ใช้แบบสอบถามในการเก็บข้อมูลจากนักศึกษานานาชาติ
จำนวน 303 คน จาก 5 วิทยาลัยและหลักสูตรนานาชาติในกรุงเทพมหานคร ผู้ตอบแบบสอบถามส่วนใหญ่
เป็นเพศชาย ศึกษาอยู่ในชั้นปี 3 ขึ้นไปตามที่คาดไว้ และมาจาก 23 ประเทศโดยส่วนใหญ่เป็นชาวไทย
ตามมาด้วย พม่า จีน เวียดนามและอื่นๆ และส่วนใหญ่ทำงานพาร์ทไทม์เฉลี่ย 24 ชั่วโมงต่อสัปดาห์

ผลการทดสอบสมมติฐานพบว่า สมรรถนะด้านภาคปฏิบัติของนักศึกษา อาทิ จากการฝึกงาน ช่วย
เพิ่มความสำเร็จของนักศึกษานานาชาติในประเทศไทยรวมทั้งความสำเร็จของนักศึกษาฯ ยังได้รับอิทธิพล
จากพฤติกรรมการใช้สื่อสังคมออนไลน์ นอกจากนี้ยังพบว่าตัวแปรอิสระบางส่วนในรูปแบบการศึกษาที่เสนอ
ในงานวิจัยนี้ สามารถนำไปใช้พยากรณ์ความสำเร็จของนักศึกษานานาชาติระดับปริญญาตรีในประเทศไทย
ได้ ที่ระดับนัยสำคัญ 0.05 ผลการศึกษานี้สามารถนำไปใช้เป็นแนวทางในการปรับปรุงหลักสูตรการศึกษา
ระดับปริญญาตรีให้สามารถสร้างความพึงพอใจต่อนักศึกษานานาชาติ และนายจ้างได้มากขึ้นตลอดจนช่วย
ขยายความรู้ให้กับวรรณกรรมในปัจจุบัน

คำสำคัญ: ความสำเร็จของนักศึกษานานาชาติ รูปแบบการศึกษา สมรรถนะของนักศึกษา พฤติกรรม
การใช้สื่อสังคมออนไลน์

Abstract

Studying for an international undergraduate degree might be one of the ways to fulfill a
consumer's security needs. The literature suggests there might be several factors affecting the
achievement of international students, e.g. academic and practical competency, lifestyle, social
media usage behavior and customized attention for international students. There are still limited
studies investigating a single educational model that includesthe factors affecting international
student achievement in Thailand. This study employs a questionnaire to collect data from 303
international undergraduate students of five international colleges and programs in Bangkok. The
majorityof respondents are male and study in year 3 or higher as expected. They come from 23
countries where the majority are Thai followed by Myanmar, Chinese, Vietnamese, and others.
Most respondents work part-time for an average of 24 working-hours per week.

Hypothesis testing revealed the higher the students' practical competency, such as doingan
internship, the greater the achievement of International undergraduate students in Thailand. Student
achievement was also affected by online social network usage behavior. It was also found that
the achievement of International undergraduate students in Thailand can be predicted by some
variables in the educational model of this study (p<0.05). The results could be used as guidelines
for improving academic curricula that might better satisfy the needs of international undergraduate
students and employersas well as extend the existing literature.

Keywords: International Student Achievement, Educational Model, Student Competency, Online
Media Usage Behavior

Introduction and Literature Review

Internet technology has played a significant role in changing consumer behavior worldwide (Canter, Link & Mckinley, 2014; Loanas and Stoica, 2014). In particular, online social media such as Facebook, Google + and LINE in Thailand (ETDA, 2013), WeChat in China, WhatsApp in the United Kingdom or Twitter in USA (Kem, 2015) have changed how consumers communicate with others and how consumers collect information and evaluate the performance of a seller's marketing strategies. It is suggested that the use of online social media such as Facebook, LINE and Instagram impacts the decision making of consumers of several generations. In particular, Generation Y, particularly in the age group between 17-22 years old,seems to be vulnerable in making decisions by using knowledge and emotion (Liengpradit, Sinthupinyo, and Anuntavoranich, 2014). Previous studies reported both advantages and disadvantages following the increasing popularity of online social mediaby this age group,which includes undergraduate students. For example, there is support for teaching and learning methods (Hull, 2014; Suthiwartnarueput. and Wasanasomsithi, 2012); support for brand engagement with IT products in Thailand (Pongpaew, Speece, and Tiangsoongnern, 2017), the brand image of private universities in Thailand (Plungpongpan, Tiangsoongnern and Speece, 2016); the concerns of parents (e.g. Duggan, Amanda, Lampe and Ellison, 2015) and the challenges and opportunities for academicians (Leon-Abao, Boholano, Filomena and Dayagbil, 2015). Differences in the social media usage behavior of students based on 6 W and 1 H questions (Who, What, When, Where, Who participate, Why and How) and the 7OsObjects(Occupants, Objects, Occasion, Outlets, Organization of influence, Objectives and Operation) (Kotler, 2013) might influence students' ability to complete undergraduate degrees. Further study is therefore necessary to address these issues.

It seems the elements of undergraduate student achievements in Thailand have been commonly measured by academic competency, which is the Grade Point Average (G.P.A.). The Office of Higher Education Commission (OHEC) of Thailand has imposed several educational quality assessment criteria for academic institutions e.g. the five desired student characteristicsset by the Thai Internal Quality Assurance (IQA) (mua.go.th). This comprises ethics and morality; knowledge; intellectual skills; interpersonal skills and responsibility; and numerical & analytical skills, communication skills and information technology skills. Thus, all academic programs offered in Thailand, including both Thai and international programs, have employed these desired characters in assessing students' academic performance. However, it is suggested from an employer perspective that university students should develop not only academic knowledge, but also practical competency during study so that they are able to apply knowledge in real world settings (e.g. Kuther, 2013; Wagner, 2009). Therefore, knowledge application indicators such as participation and winning in non-academic activities e.g. community service, contests and doing internships should be adopted to assess undergraduate student's achievement. Hence, this study proposes that the achievement of international undergraduate students couldbe measured by the integration of both academic competency and practical competency.

Consumers with different socio-demographic profiles and lifestyles i.e. activities, interests and opinions (AIOs) tend to display different behavior, such as purchasing decision (Kotler & Keller, 2016) or study performance (e.g. Hull, 2014; Suthiwartnarueput and Wasanasomsithi, 2012; Leon-Abao, Boholano, Filomena and Dayagbil, 2015) and hence study achievement. Previous studies exploring the context ofinternational studentlifestyles and their study achievement at undergraduate level in Thailand appears to be limited.

According to Maslow's hierarchy of needs (1943), there are five levels of hierarchical need. Consumers move their needs target to a higher level category after the lower ones have been fulfilled. Having international education at undergraduate level is one of the waysto fulfill a consumer's security needsthat go beyond their basic physiological needs. When it comes to overseas study, international students might face several challenges e.g. the inability to adapt to a new environment, for example the culture, the teaching approaches or school activities,which might affect student achievement(e.g. Bridgestone, 2013; Alzahrani, 2017). Thisalso raises a question as to whether more customized attention for studentsby the university e.g. individualized attention of advisory teachers, tailored activities and mentor counseling mighthelp to increase student's chance of graduating or not. Thus, the above mentioned antecedent factorsshould be included inan educational modelof the factors affecting the achievement of international undergraduate students in Thailand. This is also in line with previous studies e.g. Buasuwan (2018) who suggested that the development of learning networks, engagement, a new mind-set andskill-set for lecturers and students, and new technology are important for the successful implementation of the Thailand 4.0 policy.

To establish acommon understanding, this study defines the investigated constructs. Firstly,online social media refers to online community platforms that allow people to connect via internet access, for example Facebook, LINE or Instagram; the online social media usage behavior of students means that usage behavior which is based on the consumer behavior analysis rule comprises the 6 W and 1 H questions (Who, What, When, Where, Who participates, Why and How) and the 7Os (Occupants, Objects, Occasion, Outlets, Organization of influence, Objectives and Operation) (Kotler, 2013).This study focuses on answering the "How question and Operation Object behavior"in terms of usage amount (e.g. usage hours per day and number of social media networks used) following the scales prevalently used in surveys about consumer social networking behavior e.g. by SurveyMonkey.com, and Socialstrat.org.Secondly, student lifestyle is defined as the AIO components consisting of activities, interests and opinions of international undergraduate students in Thailand. Thirdly, student achievement means student competency in terms of both academic knowledge e.g. G.P.A. and student perceptions towards employment opportunities. Fourthly, customized attention means services or activities which are tailored to meet the international student's cultural background e.g. advisory teacher, mingling activities, mentor counseling (e.g. Bridgestone, 2013; Alzahrani, 2017). Fifthly, the socio-demographic profile of respondents means personal information e.g. gender, age, nationality and their study program. Lastly, educational model is defined as the combination of possible factors that might affect the achievement of international undergraduate students in Thailand e.g. student competency, student's social media usage behavior, student lifestyle and the university's customized attention for students.The elements of the definitionstogether with those of previous studies are used to develop measurement items for the investigatedconstructs in this study.

Research Objectives

This study raises four research objectives as follows:

1. To identify the competency elements of international undergraduate students in Thailand.

2. To identify the achievement elements of international undergraduate students in Thailand.

3. To identifythe influence ofstudent competency, social media usage behavior, lifestyle and customized attention for students on the achievement of international undergraduate students in Thailand.

4. To propose aneducational model of the factors affecting the achievement of international undergraduate students in Thailand.

Research Hypothesis

Following the above research objectives, this study proposes the following hypotheses (Figure 1):

H1a: The achievement of international undergraduate students in Thailand could be measured by their academic competency (i.e. 5 IQA learning aspects andwinning academic activities).

H1b: The achievement of international undergraduate students in Thailand could be measured by their practical competency (i.e.participation and winningnon-academicstudent activities; and doing internships).

H2a: The achievement of international undergraduate students in Thailand is affected by their online social network usage behavior in terms of usage hours per day.

H2b: The achievement of international undergraduate students in Thailand is affected by their online social network usage behavior in terms of number of social media networks used per day.

H3: The achievement of international undergraduate students in Thailand is affected by their lifestyle (i.e. activities, interests and opinions).

H4: The achievement of international undergraduate students in Thailand is affected by the university's customized attention for students.

H5: The achievement of international undergraduate students in Thailand can be predicted by the educational model of this study.

Figure 1 Conceptual Framework of the Study
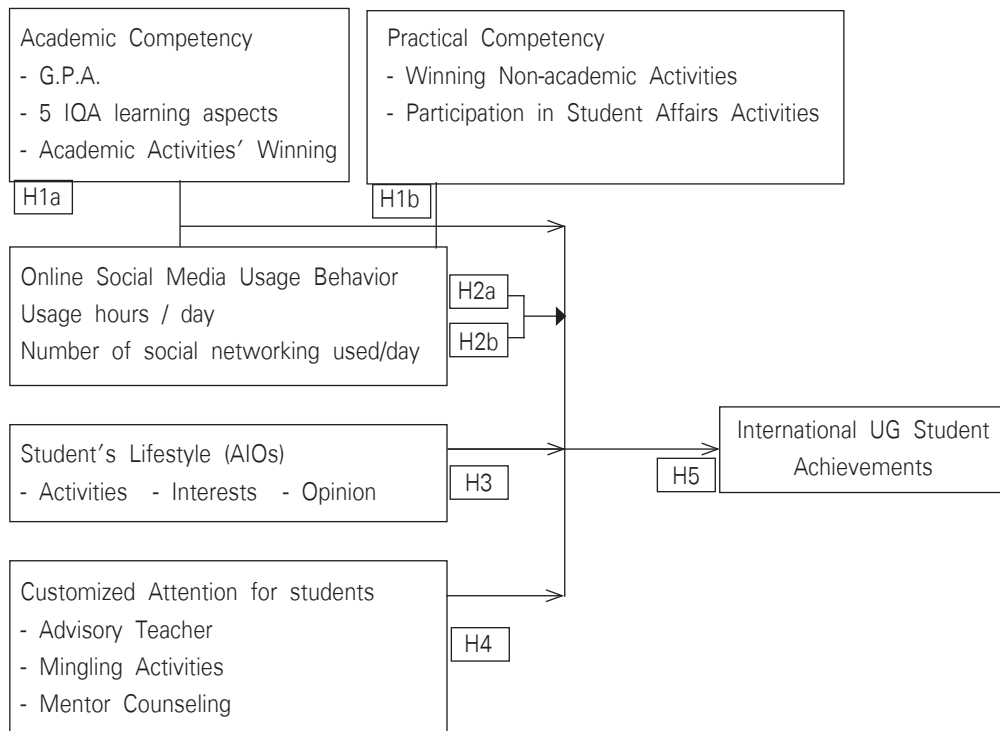
Research Methodology

        To address the research objectives, this study defined the population as international undergraduate students in year 3 orhigherat international colleges (atboth private and public universities) in Thailand. The sample is international undergraduate students in year 3orhigher atfive international colleges (at both private and public universities) in Thailand. Judgmental sampling based on the ability to access respondents was used to select the sampling of international colleges: 1) Dhurakij Pundit International College (DPUIC, Dhurakij Pundit University (DPU), called "C1" 2) Silapakorn International College, Silapakorn University (SPU),called "C2" 3) Rangsit International College, Rangsitl University (RSU),called "C3" 4) KasemBunditInternationalprogram, KasemBundit University (KBU),called "C4" 5) Asia Pacific International College, Asia Pacific International University (APU), called "C5".

        This study is a descriptive survey research adopting a questionnaire as the data collection instrument. The measurement items for student competency were developed based on the five learning aspects of Internal Quality Assurance (IQA) of the OHEC of Thailand (www.mua.go.th) consisting of academic competency (ACACOM) and practical competency (PACOM). Academic competency (ACACOM) adopted 20 items classified into 6 groups (the five IQA learning aspects by OHEC of Thailand: ethics and morality, knowledge, intellectual skills, interpersonal skills and responsibility and numerical & analytical skills, communication skills and information technology skills; and winningacademic activities). It had an acceptable Cronbach's Alpha (α) of 0.882. The practical competency (PACOM) construct wasdeveloped based on interviews with three student employers. It adopted 8 items classified into 2 groups (participation and winning non-academic

activities e.g. community service, contests; and doing internships). It had an acceptable α of 0.707. Student lifestyle (AIO) employed 15 items classified into three groups (Activities, Interests and Opinions). It had an acceptable α of 0.856.The measurement items for online social media usage behavior: usage hours per day (ONL1) and the number of social media networks used per day(ONL2) were adapted from the "online social networking questionnaire" by SurveyMonkey.com (https://www.surveymonkey.com/r/LMWLMLS) and previous studies e.g. the report on social media usage behavior ofBarkan (2011) by SocialStrat.org.Lastly, customized attention for students by the university (CA) wasadapted from Alzahrani (2017) and Bridgestone, 2013 and the interview results of two international students' professors(e.g. recommended to have mentor counseling, tailored activities and activities for local and international students). It employed 8 items classified into 3 groups (individualized attention of advisory teachers, tailored activities and mentor counseling). It had an acceptable α of 0.809.

The dependent variable, the overall achievement of international students (NAVGACH), was measured by the students perception toward job employment opportunities (NAVGJOBACH) and the student's G.P.A. (GPA). The measurement items were adapted from the expectedqualification for thegraduate component in the output process of Thailand OHEC (Plungpongpan, Tiangsoongnern, Speece (2014; 2016); www.mua.go.th).They employed 6 items classified into 2 groups and had an approximate α of 0.608. Overall, the majority ofinvestigated constructs had acceptable internal consistency shown by Cronbach's Alphas (α) between 0.707 and 0.882 (DeVellis, 2003 and Nunnally & Bernstein, 1994).

Data were collected during December 2014 - March 2015. According to the Taro Yamane table with a 5% sampling error at a 95% confidence level, this study should involve around 400 respondents. However, this study received 308sets with 5incomplete sets (missing information). Therefore, 303 completed sets or 75.75% of the response rate was achieved. This is because data collection was conducted during different semesters at the sampledcolleges. The results of the expert opinion survey of three international professors and one parent at international colleges in Bangkok were used to adapt measurement questions e.g. to reduce ambiguity inthe phrase'customized attention' by adding "for students; by university"; to add optional choices for social media networks; to use a ratio scale to identify the usage hours per day and then number of social media networks used per day; to remove the repeat question about G.P.A. in Part1: Personal Information and to ask it only in Part4: Student Achievement; and to add the phrase "as of previous semester" followed by G.P.A.

Results and Discussion

The data were normally distributed as most variables had -1<Skewness<1 and -2<Kurtosis<2 (TabachnickandFidell, 2007).All respondents study in year 3 or higher as expected. The majority are male (62.7%). They are from 23 countries and the majority are Thai (60.4%), followed by Myanmar (10.2%), Chinese (9.6%), Vietnamese (3.4%), Indonesian (2.6%), Malaysian (2.3%), Cambodian (1.7%), German and Dutch (1.3% each), Lao and Nigerian (1% each), and others.Most respondents are older than 20 years old (95.4%)and earn monthly income of Baht5,000-10,000 (72.3%), followed by Baht 10,001-15,000 (13.5%), Baht15,001-25,000 (9.2%) and more than Baht 25,001 (4.9%).We did not ask respondents about their sources of income; however it was found 47.2% of them worked part-time for an average of 23.96 working-hours per week.The majority of respondents

are students of C5 (39.6%) followed by C2(16.2%), C4 (15.5%), C1(14.5%), and C3 (14.2%). Unfortunately, there were many missing answers on the study program question (60.1%) because was an open-ended question. However, from thelreceived responses (39.9%) most studied Airline Business(12.9%) followed by Business Administration (9.2%), Education (7.3%), Science and IT (4.3%), Accounting (2.6%), Applied Theology (2%) and Art (1.6%).

This study employed Confirmatory Factor Analysis (CFA) with Structural Equation Modeling (SEM) to ensure the model fit. The results revealed that the model had acceptable Goodness of Fits with Chi-square value X^2= 127.32,df= 102, p=0.10 (>0.05), X^2/df=1.20 (<2.00), CFI = 0.99 (≥0.95), AGFI = 0.93 (slighly<0.95), RMSEA=0.045 (<0.05) and, SRMR=0.044 (<0.05) (Joreskog & Sorbom, 1996; Hair, et. al, 2006). The hypotheses were then tested by using a standard multiple regression analysis. The proposed predictors,academic competency (ACACOM), practical competency (PACOM), usage hours per day (ONL1), number of social media networks used per day (ONL2), studentlifestyle (AIO) and university's customized attention for students (CA) were entered to test their influence on the overall achievement of international undergraduate students(NAVGACH) in Model A.The dependent variable, NAVGACH, consisted of 2 sub-items which are perception of students toward job employment opportunities (NAVGJOBACH) and the student's current G.P.A. (GPA). This study also conducted an additional test to determine the influence of the predictors proposed above on the sub-items of the overall achievement of international studentperception of students toward job employment opportunities (NAVGJOBACH) in Model B and the student's current G.P.A. (GPA) in Model Cas proposed in the research objectives.

The results of the correlation matrix revealed most predictors variables (practical competency: PACOM; usage hours per day:ONL1; student lifestyle: AIO; and the university's customized attention for students: CA)are significantly correlated with the dependent variable (overall achievement of international undergraduate students) which met the multiple regression assumption (r = .122-.223, p<0.05). The results of the regression analysis are shown in Table 1 (1.1-1.4). In Table 1.1, all six independent variables (student's academic competency: ACACOM, student's practical competency: PACOM, student lifestyle: AIO, social media usage hours per day: ONL1, number of social media uses per day: ONL2 and customized attention for students: CA)were entered as predictors for the overall achievement of international undergraduate students (NAVGACH) in Model A; for the perception of students toward job employment opportunities (NAVGJOBACH) in Model B; , and for the student's current G.P.A. in Model C. Table 1.2 and 1.3 report the significant F-test value of Model A, B and C (p.<0.01 which meanssomepredictors can explain variances in the overall achievement of international undergraduate students (Model A), in the perception of students toward job employment opportunities (Model B), and in the student's current G.P.A. (Model C) at p<0.01.

Table 1.4 presents the results of hypothesis testing as follows: H1a was not supported. In Model A, the achievement of international undergraduate students in Thailand could notbe measuredby their academic competency (i.e. G.P.A., 5 IQA learning aspects, and winning academic activities) (Sig.=.616, p>0.05).Additional testingrevealedthat H1a was also not supported when measuring student achievement by only the perception of students toward job employment opportunities in Model B (Sig.=.326, p>.05).In contrast, H1a was supported when measuring student achievement by only the student's G.P.A. (Model C) (Sig.=.001, Beta=.273, p<.0.01). This result seems to be sensible and is consistent with Kuther (2013) and Wagner (2009)who suggested employers prefer

graduates who are equipped with not only academic knowledge, but also the ability to apply knowledge inreal world settings.

H1b was supported. In Model A, the achievement of international undergraduate students in Thailand could be measured by their practical competency (i.e. winning and participation in non-academic student activities).This means the greater the student's practical competency, the greater the achievement level of international undergraduate students in Thailand (Sig.=.011, Beta=.354, p<0.05).Theadditional findingssuggested H1b was also supported when measuring student achievement by only the perception of students toward job employment opportunities (Model B) (Sig.=.005, Beta=.389, p<.0.01). However, H1b was not supported when measuring student achievement by only the student's G.P.A. (Model C) (Sig.=.106, p>.0.05).This result is also in line with H1a not being supported. They both emphasized the need to produce graduates with both academic and practical competency, especially those with the ability to apply knowledge in real work situations (e.g. Kuther, 2013; Wagner 2009).

H2a was not supported in Model A, B and C. The achievement of international undergraduate students in Thailand was not found to beaffected by their online social network usage behavior i.e. usage hours per day (p>0.05). Interestingly, H2b was supported in both Model A and Model B when changing the predictor to the number of social media networks used per day.This means the lower the number of social media networks used per day, the higherthe achievement level of international undergraduate students in Thailand (Sig.=.019, Beta= -.211, p<0.05). Similarly, H2b was also supported in Model B when measuring student achievement by only the perception of students toward job employment opportunities (Sig.=.014, Beta= -.220, p<.0.05). The negativecoefficient Betas from Model A and B suggested that a greater number of social media networks used per day did not help to increase the success of international undergraduate students when measured by both the student's perception towards job employment opportunitiesand the student's G.P.A. However, it suggests that using social media might help to support teaching and learning methods (Hull, 2014;Suthiwartnarueput. and Wasanasomsithi, 2012) and hence student achievement. This implies other factors relatedto social media usage behavior and the relationship with student's achievement should be further investigated.Conducting in-depth interviews with students might help to identify such factors.

H3 was not supported. In Model A. The achievement of international undergraduate students in Thailand was not affected by their lifestyle (i.e. activities, interests and opinions) in Model A (p>0.05).The additional finding suggestedsimilar results for Model B and C (p>0.05).These results provide new understanding that student lifestyle did not affect student success which is not in line with the suggestion that consumers with different socio-demographic profiles and lifestyles i.e. activities, interests and opinions (AIOs) tend to have different behavior, such as in purchasing decisions (Kotler& Keller, 2016) or study performance (e.g. Hull, 2014; Suthiwartnarueput and Wasanasomsithi, 2012; Leon-Abao, Boholano, Filomena and Dayagbil, 2015), and hence study achievement. Thus this conflicting finding should be clarified in future study.

H4 was not supported. In Model A, the achievement of international undergraduate students in Thailand is affected by the university's customized attention for students (Sig.=.476 p>.0.05). The additional finding also revealed a similar result for Model B when measuring the achievement of international undergraduate students by only the student's job employment opportunities (Sig. = .304, p>0.05). This result is not in line with previous studies (e.g. Bridgestone, 2013; Alzahrani, 2017)

which suggested that customized attention for students e.g. providing an advisory teacher, mingling activities and mentor counseling might affectthe achievement of international undergraduate students. In contrast, the achievement of international undergraduate students in Thailand is affected by the university's customized attention for students when measuring the achievement of international undergraduate students by only the student's G.P.A. in Model C (Sig.=.033, Beta= -.224, p<.0.05). This result means more customized attention for a student, e.g. having mingling activities and mentor counseling,did not help to increase the student's academic competency when measured by their G.P.A. It implies the university should focus more on other practices such as providing tutorial courses to increase students' academic competency. This conflicting result seems to be true in Thailand where most academic institutions are recommended to use G.P.A. to assess student performance and as a graduating criterion e.g. a minimum G.P.A. of 2.0 for bachelor degree level (www.mua.go.th).

H5 was partially supported. The results presented in Tables 1.2 and 1.3 reported a partially significant F-test value for Models A, B and C (p.<0.01). This means some predictors can explain variances in the achievement of international undergraduate students in Thailand. When measuring the achievement of international undergraduate students (NAVGACH) by both the perception of students toward job employment opportunities (NAVGJOBACH) and the student's current G.P.A (GPA) in Model A, the influencing factors are student's practical competency (PACOM) (Sig.=.011, Beta=.354, p<0.05) and the number of social media networks used per day (ONL2) (Sig.=.019, Beta= -.211, p<0.05). This means increasing students' practical competency e.g. participation in non-academic activities and doing an internship would help to increase the achievement of international graduate students in Thailand (Beta=.354, p<0.05). However, the greater the number of social media networks used per day might not help to increase student achievement (Beta= -.211, p<0.05). This study found two similar influencing factors and meanings in Model B when measuring student achievement by only the student's perception toward job employment opportunities ((NAVGJOBACH) (Sig.=.005, Beta=0.89, p<0.01). The similar result suggested providing opportunities to acquire practical competency is one of the key factors to enhance the achievement of international undergraduate students in Thailand. In contrast,the two influencing factors were changed to be the student's academic competency (ACACOM) (Sig.=.001, Beta=0.273, p<0.01) and customized attention for students (CA) (Sig.=.033, Beta=-.224, p<0.05) when measuring student achievement by only the student's G.P.A. This result seems to be sensible as academic competency tends to contribute to study performance, which relies more on G.P.A. in Thailand. However, it was found that customized attention for students e.g. providing advisory teachers, mingling activities and mentor counseling did not help to increase student achievement when measured by the student's G.P.A. These results support the findings on H1a. The result indicates an association between students' academic competency and the G.P.A which is seen as a fact in the educational sector of Thailand.In summary, some proposed antecedent factors in the educational model of this study could predict the achievement of international undergraduate students in Thailand.

Table 1 Results of Regression Analysis

1.1 Variables in Models

Model	Variables Entered	Method
a	CA, ONL1, ONL2, ACACOM, AIO, PACOMd	Enter
b	CA, ONL1, ONL2, ACACOM, AIO, PACOMd	Enter
c	CA, ONL1, ONL2, ACACOM, AIO, PACOMd	Enter

Dependent Variable: NAVGACH; b. Dependent Variable: NAVGJOBACH; c. Dependent Variable: GPA; d. All requested variables entered.

1.2 Model Summary [a,b,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
a	.281a	.079	.060	.56681	.079	4.236	6	296	.000**
b	.278b	.077	.059	.67512	.077	4.130	6	296	.001**
c	.306c	.094	.075	.48970	.094	5.103	6	296	.000**

Note: * Significant at p<0.05 ** Significant at p<0.01

a. Predictors: (Constant), CA, ONL1, ONL2, ACACOM, AIO, PACOM; Dependent Variable: NAVGACH
b. Predictors: (Constant), CA, ONL1, ONL2, ACACOM, AIO, PACOM; Dependent Variable: NAVGJOBACH
c. Predictors: (Constant), CA, ONL1, ONL2, ACACOM, AIO, PACOM; Dependent Variable: GPA

1.3 ANOVA[a,b,c]

Model		Sum of Squares	df	Mean Square	F	Sig.
a	Regression	8.166	6	1.361	4.236	.000**
	Residual	95.097	296	.321		
	Total	103.264	302			
b	Regression	11.293	6	1.882	4.130	.001**
	Residual	134.911	296	.456		
	Total	146.204	302			
c	Regression	7.342	6	1.224	5.103	.000**
	Residual	70.983	296	.240		
	Total	78.325	302			

Note: * Significant at p<0.05 ** Significant at p<0.01

a. Dependent Variable: NAVGACH; Predictors: (Constant), CA, ONL1, ONL2, ACACOM, AIO, PACOM
b. Dependent Variable: NAVGACH; Predictors: (Constant), CA, ONL1, ONL2, ACACOM, AIO, PACOM
c. Dependent Variable: GPA; Predictors: (Constant), CA, ONL1, ONL2, ACACOM, AIO, PACOM

1.4 Coefficients[a,b,c]

Model	Coefficients[a]			Coefficients[b]			Coefficients[c]		
	Standardized Coefficients (Beta)	t	Sig.	Standardized Coefficients (Beta)	t	Sig.	Standardized Coefficients (Beta)	t	Sig.
Constant		9.970	.000		8.736	.000		9.021	.000
ACACOM (H1a)	-.042	-.502	.616	-.082	-.984	.326	.273	3.292	.001**
PACOM (H1b)	.354	2.569	.011*	.389	2.824	.005**	-.222	-1.621	.106
AIO (H3)	-.053	-.420	.675	-.089	-.709	.479	.245	1.970	.050
ONL1 (H2a)	.063	.699	.485	.040	.441	.660	.162	1.812	.071
ONL2 (H2b)	-.211	-2.363	.019*	-.220	-2.461	.014*	.049	.558	.578
CA (H4)	.075	.714	.476	.109	1.030	.304	-.224	-2.143	.033*

Note: * Significant at p<0.05 ** Significant at p<0.01

a: Dependent Variable: Overall achievement of international undergraduate students (NAVGACH); b: Dependent Variable: Job employment opportunity (NAVGJOBACH); c: Dependent Variable: student's G.P.A. (GPA)

Implications and Recommendations

H1a was not supported in testing major Model A. The achievement of international undergraduate students in Thailand could not be measuredby their academic competency (i.e. G.P.A., 5 IQA learning aspects, and winning academic activities). Also, there were similar resultswhen measuring student achievement by only the perception of students toward job employment opportunities in Model B.This similar finding suggested international undergraduate students do not consider that having only academic competency would help them to get employment. It signifies the need for universitiews in Thailand to focus on providing international students with more practical skills such as doing internships and study visits to real workplaces in their curricula. The result of H1b also helps to support the previous suggestion. It also indicatesthat students perceive that having higher practical competency would give them a higher achievement level in employment. This implies international colleges in Thailand should focus more on enhancingstudent's practical skills in teaching and learning e.g. by encouraging students to participate in non-academic activities organized by the university such as community service, freshmen day; contests; supporting students to participate in non-academic activities and contests; supporting students to join sport games, student committee association; and making internships compulsoryin academic curricula. Hence, international colleges in Thailand

might use this suggestionto revise their academic curricula accordingly. Our suggestion is also in line with the recommendation that the development of a new mind-set and skill-set by lecturers and studentsis important for the successful implementation of Thailand 4.0 (Buasuwa, 2018).

The achievement of international undergraduate students in Thailand was not affected by their online social network usage behavior i.e. usage hours per day (p>0.05 in all testing models). However, it was found that the lower the number of social media networks used per day, the higherthe achievement level of international undergraduate students in Thailand (Model A) and the higher was theperception of students toward job employment opportunities. This implies other factors relatedto the social media usage behavior of students should be further explored. For example, from other questions inthe 6W1H consumer analysis rule and as often used in previous surveys (e.g. SocialStrat.org, SurveyMonkey.com) questions such as "What type or category of social media networks do they use?"; "When do they use it in terms of time and usage period e.g. before the examination periods"; "Why do they use it?e.g. when doing assignments", might affect student behavior (Barkan,2011; Kotler, 2013), and perhaps the achievement of international undergraduate students in Thailand.

Student lifestyle (H2) and customized attention for students (H3) were found to have no relationship with the achievement of international undergraduate students when measured by both the student's overall achievement and by only theperception of students toward job employment opportunities. This result gives new practical understanding that the lifestyle of studentssuch as different activities, interests and opinions did not affect student success, which is not in line with the suggestion that consumers behavior tends to be influenced by their lifestyle (Kotler& Keller, 2016). This raises another area for further study to identify whether this result will be true when replicating the study model with a larger sample of international colleges and with larger sample sizes.

This study found some predictors can explain variances in the achievement of international undergraduate students in Thailand i.e. student's practical competency and the number of social media networks used when measuring student success from the student's overall achievement and only the student's perception toward job employment opportunities in Thailand. This research also revealed that student's academic competency and customized attention for students by the university influence student achievement when measured by student G.P.A. Therefore, future study might employ this study model to determine whether it could be generalized to a larger unit of analysis such as across Thailand or in a different context such as studying only in public or private universities in Bangkok. This will help to give a clearer understanding on this finding.

There are some limitations which might limit the generalizability of the results. Firstly, the results were derived from representatives of only four international colleges in Thailandwhile there are around fifty international colleges in Thailand in 2018 (https://studyinthailand.org/study-abroad-thailand-university/university-college-thailand.html). Hence, future study might be conducted with a larger number of international colleges in Bangkok and in big regional cities such as Nonthaburi, Pathumthani, and Chiangmai. Secondly, increasing the number of respondents might help to assure the validity of the research methodology employed in this study. Lastly, the findings are true based on the proposed relationships between the investigated constructs while there might be other influencing factors on the achievement of international undergraduate students who come from diverse backgrounds, such as cultural difference factors and socio-demographic difference factors. Therefore, these factors should be added into the current study model. For example, the socio-demographic profile of students from countries that have higher accomplishment levels could be used as a model for students in lower accomplishment categories.

It is expected that the results of this study could be used as guidelines to improveacademic curricula that better satisfy the needs of international undergraduate students, employers and extend the existing literature in relevant fields, especially international undergraduate study in Thailand.

References

Alzahrani, M. (2017).Challenges Facing International Students on Campus.Posted on December 18, 2017. Retrieved from https://www.wes.org/advisor-blog/challenges-facing-international-students-on-campus/

Barkan, T. (2011). SPECIAL REPORT: How are the members of associations using social media today? Retrieved from https: //uia.org/sites/ dev.uia.be/ files/misc_pdfs/ roundtable/ Social_Media_Use_ Survey _Report _Individuals_2011.pdf.Retrieved on 8 April, 2018.

Bridgestock, L. (2013), Top 5 Challenges of Studying Abroad. Retrieved fromhttps://www. topuniversities.com/ blog/ top-5-challenges-studying-abroad.

Buasuwan, P. (2018) "Rethinking Thai higher education for Thailand 4.0", *Asian Education and Development Studies, 7*(2), 157-173, Retrieved fromhttps://www.emeraldinsight.com/doi/ abs/10.1108/AEDS-07-2017-0072.

Canter, N., Link, R. and Mckinley, S. (2014). The best of both worlds: integrating online data into marketing mix models, *2 (1).* Retrieved from http://www.nielsen.com/content/dam/corporate/ us/en/reports-downloads/2014%20Reports/whats-next-integrating-online-data-into-marketing -mix-models.pdf

Cleesuntorn, A. (2013). Education in Thailand and the challenging issues. *Rajabhat Journal of Sciences, Humanities & Social Sciences. 14*(2), 1-12, July-December 2013.

ETDA (2013).Thailand Internet User Profile 2013. *Electronic Transactions Development Agency (Public Organization).* Retrieved from https://www.slideshare.net/etda-thailand/thailand-internet-user-profile-2013-51180739.

DeVellis, R. (2003). Scale development: theory and applications. *Theory and Application.* Thousand Okas, CA: Sage.

Duggan M., Amanda A., Lampe C. and Ellison N. (2015).Concerns about children, social media and technology use. Retrieved from t http://www.pewinternet.org/2015/07/16/concerns-about-children-social-media-and-technology-use/

Five Common Cultural Challenges for International Students (2015). *Fly Wire Blog.* Retrieved fromhttp://blog.flywire.com/2015/10/14/5-common-cultural-challenges-for-international-students/.

Hull, K. (2014). Using Facebook in the classroom. *International Journal Social Media and Interactive Learning Environments, 2*(1), 60-69. Retrieved from http://www.inderscience. com/storage/f467511910281123.pdf

Hair, J.F., Black, B., Babin, B., Anderson, R. E., and Tatham, R. L. (2006). *Multivariate Data Analysis* (6[th]ed.). New Jersey: Pearson Prentice-Hall International Inc.

Joreskog, K. G. and Sorbom, D. (1996). *LISREL8: User's Reference Guide.* IL:Scientific Software International Inc.

Kemp, S. (2015). *Digital, Social & Mobile Worldwide in 2015.* Retrieved from http://wearesocial. net/tag/statistics/.

Kotler, P. (2013). *Marketing Management* (12[th]ed.). Pearson Prentice Hall: New Jersey.

Kotler, P. & Keller, L (2016). Marketing Management (15th Global ed.). Pearson Prentice Hall: New Jersey.

Kuther, T. (2013). "What employers seek in job applicants: You've got the skills they want", *American Psychological Association.* Retrieved fromhttp://www.apa.org/ed/precollege/ psn/2013/09/job-applicants.aspx.

Leon-Abao de E., Boholano H., Filomena T. and Dayagbil (2015). Engagement To Social Networking: Challenges And Opportunities To Educators, *European Scientific Journal* (June ed.). 11 (16), 173-191. ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431173.

Liengpradit P., Sinthupinyo, S. and Anuntavoranich, P (2014). Trend of Facebook Usage Behavior and Impacts on the Attitudes amongst Friends in Social Network Circle of Thai Youths: Case Study on College Students. *International Journal of Social Sciences, 3*(2), 68-80. Retrieved from http://www.iises.net/download/Soubory/soubory-puvodni/pp-68-80_ijossV3N2.pdf.

Manual of Internal Quality Assurance for Higher Education (2014) (คู่มือการประกันคุณภาพการศึกษา ภายในระดับอุดมศึกษา พ.ศ.2557) Retrieved from http://www.mua.go.th/users/bhes/ QAMUA58/qa%20manual58/manual58.htm

Maslow, A. (1954). *Motivation and personality.* New York, NY: Harper.

Loanas, E. and Stoica, I. (2014).Social Media and its Impact on Consumers Behavior. *International Journal of Economic Practices and Theories,* 4 (2), 295-303. Special issue on Marketing and Business Development, e-ISSN 2247–7225.

Nunnally, J., Bernstein, L. (1994). *Psychometric theory.* New York: McGraw-Hill Higher, INC.

Online social networking questionnaire (2018). *SurveyMonkey.com.* Retrieved from https://www. surveymonkey.com/r/LMWLMLS.

Plungpongpan, J., Tiangsoongnern, L. and Speece, M. (2016), University social responsibility and brand image. *International Journal of Educational management, ID IJEM-10-2014-0136 30*(4), 571-591.

Pongpaew, W., Speece, M. Tiangsoongnern, L. (2017).Social Presence and Customer Brand Engagement on Facebook Brand Pages. *Journal of Product & Brand Management, 26*(3), 262-281. Retrieved from https://doi.org/10.1108/JPBM-08-2015-0956

Suthiwartnarueput T. and Wasanasomsithi P. (2012). Effects of Using Facebook as a Medium for Discussions of English Grammar and Writing of Low-Intermediate EFL Students, *Electronic Journal of Foreign Language Teaching, 9*(2), 194–214. Retrieved from http://e-flt. nus.edu.sg/v9n22012/suthiwartnarueput.pdf.

Tabachnick, B. G., and Fidell, L. S. (2007). *Using Multivariate Statistics* (5th ed.). New York: Allyn and Bacon.

Wagner, T. (2009). *The Global Achievement Gap from the Center for Global Education at Asia Society.* Retrieved from https://asiasociety.org/education/seven-skills-students-need-their-future.

Which universities offer international degree programs? *Study in Thailand. org.* Retrieved from https:// studyinthailand.org/study-abroad-thailand-university/university-college-thailand.html.

Yamane, Taro. (1967). *Statistics, An Introductory Analysis* (2[nd]ed.). New York: Harper and Row.