Utilizing the 4 P's Framework

for Student Retention in Thai Private Universities

Poonpilas Asavisanu

Abstract—Increased pressure on Thai private universities to retain students in the wake of decreasing enrollment due to changing population demographics and mounting competition from both public and private universities, calls for a more practical approach to the planning and implementation of strategy and action regarding student retention. Most retention research has tended to be based on predominant models and theories of student retention developed from studies on western student populations. Thus, the explanatory or predictive power of these theories to accurately describe reasons behind student attrition in regional or local settings may be limited or inconclusive due to cultural, psychological or organizational differences in Asia and especially, Thailand. This paper will explore the use of the 4 P's framework as developed at De Paul University in the context of the development of student retention strategies for Thai private universities. The exploration of student retention from a perspective which includes focus on specific institutional factors such as profile, progress, process, and promise may assist private universities in the development of practical applications for student retention that have increased effectiveness and efficiency.

Keywords—student retention, Thai private universities

Introduction

The issue of student retention remains an important concern for higher education providers in Thailand. Changing population demographics and competition continue to be drivers that are forcing Thai private universities to address issues of student retention. Thailand is considered to be an ageing society. According to the World Bank, in 2015, 11 percent of the Thai population were 65 years or older and by 2040 it is projected to have more than a quarter of the population aged 65 and older [1] The National Economic and Social Development Board of Thailand, predicts that the number of school aged population (21 and under) will fall to 20 percent of the population, in contrast to 62 percent in 1980. Since 2006, there has been a steady decline in the number of college enrollments [2]. This drop has significant effects on higher education providers both public and private in Thailand.

Significant changes to the higher education sector in the country have arisen due to the enactment of the 1999 National Education Act. The reform of the higher education sector was expected to meet the economic, developmental, and societal needs of the country. Under this act, structural and fiscal reform of public universities was also recommended [3]. Consequently, these policy changes have increased competition in the higher education sector. Public university autonomy was encouraged, allowing public universities greater freedom in administrative and academic areas. This resulted in the promulgation of the number of higher education institutions and the number of programs offered by public and private universities. In the Thai context, a handful of public universities have had a reputation for being more 'prestigious'. Students, through

the mechanism of entrance examinations, have tended to vie for extremely competitive seats at these universities. Private universities, who have functioned as "demand absorbers", have had open enrollment policies in order to admit students that did not take the entrance exams or were unable to gain admission. Since the introduction of autonomy, public universities compete with private by introducing open-enrollment, full fee programs, establishment of satellite branches, and partnership with overseas institutions to attract students [4]. These changes, coupled with the changing demographics of the country, puts the issue of student retention at the forefront of concern for private universities.

п. Limitations of the Conceptual Theories of Student Retention

Student retention, as a research topic, has been widely studied since the 1970's. Student retention theories fall into major theoretical perspectives; sociological, organizational, psychological, economic, and cultural [5]. Of sociological Vincent perspectives, Tinto's interactionalist theory, remains the most popular as is evident by the number of citations and references to his work [6]. According to Tinto (1993), student departure is a longitudinal problem that is related to the students' ability to become academically and socially integrated or engaged into the environments of the institution. Organizational perspectives are based on the students' perceptions and experiences of institutional structures and processes at the university. These influence the students' sense of belonging and are said to affect their decisions to stay or leave. Bean's (1980) Model of Student Departure was developed to explain organizational factors that contributed to student attrition. His model was based on organizational employee turnover [7]. Psychological perspectives focus on students' psychological characteristics such as academic aptitude, motivation, personality, and student development. Bean and Eaton suggested that psychological processes such as coping strategies, students' locus of control, and perceptions of selfefficacy influence academic and social integration. Economic perspectives focus both on the students' perceived cost benefit of obtaining a college degree and their ability to pay for college [8]. Cultural perspectives focus on underrepresented students such as minorities and first-generation students and suggest that the college experience for these students is difficult because the dominant norms are different from their own experiences and values. Despite which theories are tested or used as the basis for retention research, most models include the following five sets of variables: 1). students' background characteristics, 2). characteristics of the institution such as type, size, and selectivity, 3). interactions with faculty, staff, and peers, 4). student perceptions of the learning



International Journal of Business & Management Study – IJBMS 2018 Copyright © Institute of Research Engineers and Doctors , SEEK Digital Library Volume 5 : Issue ₁ - [ISSN : 2372-3955] - Publication Date: 25 June, 2018

environment, 5). the quality of effort students devote to educationally purposeful activities [9].

No one theory can be said to account for all the possible variables. Conclusions drawn from research have been inconclusive and if one looks at the attrition rates in the west over the past years where much of the research has occurred, retention rates have remained relatively stable. Agreement as to what constitutes persistence and the appropriate measure of it has also confounded the research. Differences in the definitions of retention may result in inaccurate and incomplete measures that have affects on the data obtained, the reported success of implemented retention measures, and

overall measures of student success. Due to these limitations, researchers are hindered in validly identifying predictors of persistence and institutions and may be prevented from implementing effective policies [10]. Tinto himself states that research into student attrition has not been conclusive for several reasons: (1) the reasons for students leaving are not necessarily the same reasons why they persist; (2) research and theory focus on concepts that may be difficult to measure and/or translate into definite course of action; (3) institutional actions tend to involve disconnected activities and actions that lessen the impact of results[11].

Poonpilas Asavisanu, Assumption University, Thailand

III. The 4 P's Framework for Student Retention

Few institutions are able to claim substantial improvements in their retention rates despite the abundance of research. The inadequacy of retention models, problems with measurement and definition and institutional action that occurs in isolation to other variables can be said to be the cause of why efforts at increasing student retention have not shown significant success. An alternative approach or framework has been developed by researchers at DePaul University in Chicago, USA. Developed by David Kalsbeek and other academics at the university's Division of Enrollment Management and Marketing, the 4 P's framework provides a practical and integrated approach to looking at student retention that can be applicable to various institutional settings [12]. Essentially, the 4 P's approach recommends centering institutional focus and action on the following areas: profile, progress, process, and promise.

A focus on the student profile or the attributes of the entering students can help the university enhance the effectiveness of the overall retention management strategy by balancing its enrollment goals and university objectives. The research has demonstrated certain relationships and variables that are predictive of student attrition such as standardized test scores, diversity characteristics, academic preparedness, and first-generation status. How universities are stratified in the marketplace of higher education, to a large extent, determines the entering profile of its students [13].

Students' progress in their courses in their first year of university, is considered to be an essential aspect as it leads to the end objective, graduation. The 4 P's focus on progress centers efforts on identifying and improving structures and processes that impede student advancement such as courses with high failure or withdrawal rates or courses that constitute the foundation for other courses and if not passed, make students' unable to take further courses [14]. Faculty play an important role in the focus on progress as they are key in being able to indentify and intervene with students who may show a high risk. Attention to student advising practices, how courses are scheduled and financial assistance can also assist students in making timely progress towards graduation.

Focusing on process involves looking at processes that students encounter in their experience at the university including advising, registration, billing, and financial aid and other processes. Improving these processes to make the experience more convenient and easier for all students, not only those at risk, is helpful in creating an environment for all that enriches the university experience [15].

A brand promise by a university is a sign of the university's commitment to the student for providing what it promised to deliver. Universities that are able to convey to their prospective students what it stands for and what it can deliver, will establish an image that will position themselves in the market [16]. Satisfying students needs to be focused on satisfying them in the areas that are connected to the institution's brand promise [17]. Student attrition can be regarded as a result of unmeant promise or dissatisfaction with the university and/or the university experience. Consequences of this dissatisfaction are not only in the area of retaining students, but can also be felt in the overall deterioration of the university's brand and image. If the student has positive experiences that satisfy them individually, it also works to strengthen the university's position as a whole. Therefore, a focus on promise is a focus by the university to integrate student retention strategies with overall institutional marketing to deliver an educational experience that delivers satisfaction for both students and their families.

IV. The 4 P's Framework in the Context of Thai Private Universities

A. Student Profile

A general consensus in Thailand is that students applying for private universities may be less academically prepared than for public university applicants [18]. If taken into context, this can be assumed if one looks at the history of Thai higher education. Higher education in Thailand developed from an elitist and heavily centralized model. The first universities were public institutions and were set up in the Bangkok area to serve royal and bureaucratic elites. State-owned, policies, decision making, and resources were concentrated in Bangkok as were the majority of the student body. Access was limited for those outside the immediate region and even then, state-owned or public universities offered places only to students who ranked high or



International Journal of Business & Management Study – IJBMS 2018 Copyright © Institute of Research Engineers and Doctors , SEEK Digital Library Volume 5 : Issue 1- [ISSN: 2372-3955] - Publication Date: 25 June, 2018

performed well on state examinations [19]. Private universities were founded much later. This mentality of favoring of public universities over private universities continues to this day in Thailand. Higher education reform and deregulation of control has increased the number of higher education institutions both public and private. Public university autonomy and increased competition have spurred public universities to set up new programs with direct admissions and offer international programs and joint degree programs that are in direct competition with private universities [20]. By and large, private universities in Thailand have been considered as "demand absorbers" in that they have generally emerged to absorb the demand that the public sector could not accommodate due to capacity or selectivity [21]. Open admissions imply that there is high diversity in student academic background and preparedness.

Private universities who are aware of the diversity in ability of their incoming students would do well to focus retention efforts by providing assistance to students in the areas they are known to be weak. A common lament nowadays is how poorly Thai students are doing in comparison to other countries and specifically, nearby neighboring countries. Scores in international tests such as PISA (Program for International Student Assessment) show Thai students scored below average in the 2015 test in areas of mathematics, reading, and science. In contrast, neighboring countries such as Singapore and Vietnam have higher than average scores [22]. An article by the head of the Thailand Development Research Institute, stated that one of the major failures of the education system was that it did not teach students the skills and ability to think for themselves. Students are not taught critical thinking skills and teambuilding [23]. Teaching practices in Thailand, and Asia as a whole, are rooted in rote learning. Education is focused on transferring academic knowledge and memorybased learning, thus students perform poorly in analytical thinking, critical thinking, and problem solving [24]. This weakness in the Thai K-12 education sector has ramifications for the higher education sector as well. Focus on incoming student profiles for private universities should include not only the traditional remedial areas such as mathematics and English, but also on the cognitive skills such as critical thinking and problem solving to enhance success. In a review of the efficacy of remedial courses, one of the factors contributing to successful remediation was the emphasis on critical thinking in the remedial curriculum [25]. Teaching critical thinking in addition to or embedded in other remedial courses has also been an effective way to develop student skills. According to Tinto, the embedding of basic skills within academic courses are very helpful to students and early successes create the likelihood of future success [26]. Research done on community college students in a remedial writing course where critical thinking skills were embedded in the assignments has shown to be effective in increasing students' performance [27]. Research on enhancing critical thinking skills on entry level nursing students has also been shown to affect academic performance and critical thinking scores may also a predictive ability as to students passing the course and completing the program [28].

B. Student Progress

Evidence of research data shows that most student attrition happens during the first year of college. [29]. Although there is a scarcity of official statistics for retention rates in Thai private universities, independent studies have confirmed that students typically drop out during the first year [30,31]. Academically related issues regarding low grades and/or course failure seem to be paramount. Students often perceive low grades as a sign that they will not be able to successfully complete other courses or move forward in their degree objectives, thus they voluntarily drop out without waiting for the university to put them on academic probation. Students perceptions of their abilities, low grades, and perceived repercussions may cause some students to underutilize university services such as academic advising, counseling, tutoring services that are designed to assist them. By the time the university finds out that they have dropped out, usually because they have not registered for the next term, it is already too late. To ensure progress, at risk students should be identified soon as possible. Faculty can play a major role in this function by both identifying at risk students and by creating environments in their class that facilitate student engagement. This is especially important for courses that are known to have high rates of failure or withdrawal.

Courses with frequent faculty interaction with students, where faculty utilized collaborative learning techniques, and those that emphasized higher order thinking and cognitive skills were shown to have higher student engagement [32]. Incentive-wise, faculty have reason to want to increase student retention as financial viability of the university also has ramifications for on salary, benefits, and hiring. Relating coursework to practical aspects of students' lives, getting to know students both inside and out of class, recognizing student diversity, being flexible in activities and assignments, helping students find peer support, and recognizing and assisting those students at risk for dropping out are some recommendations how faculty can supplement institutional retention efforts [33].

c. University Processes

Students encounter a variety of administrative and bureaucratic processes in their dealings with a university such as admissions, registration, financial, advisory and other student services. These 'business procedures' are said to impact student persistence. Bean (2005) asserts that if the bureaucratic aspects of the institution make students feel that they are being given the run around or service providers are unhelpful, they can develop negative attitudes towards the university that can ultimately contribute to their leaving [34]. A study of students' perceptions of college services, interactions, and experiences confirms this. Students who had lower perceptions of feelings of connectedness with the university and felt that staff and faculty were less approachable had higher rates of attrition [35].

Improving the students' experience as they navigate their way through administrative processes at the university can be an important contributor to students' overall positive perception. Viewing students as 'customers' may be one approach. Traditional marketing models' definition of a



customer make comparison of students and customers difficult, as customers are said to have a). freedom of choice, b). responsibility for payment, and c). no requirements to prove merit and eligibility [36]. These observations are based on western models of universities where admissions and financial context may be different. If taken in the context of private universities in Thailand, the first two characteristics may not be that dissimilar. A true customer has the freedom of choice, and although there are time and resources spent, due to open admissions policies of private universities, students are able to switch among institutions. A characteristic of a customer is that they pay for products themselves. Tuition fees for public universities, although having risen considerably, still tend to be lower than that of private universities due to public universities being subsidized by the government [37]. Although there is availability of government loans and other sources of financial assistance, many students attending private universities fund their education through their families. These students' tuition costs may be more than double the tuition costs at limited admissions public universities [38]. Thus, students in private universities can reasonably be viewed as customers in that they have much more freedom of choice and receive little or no financial assistance from other sources. That being said, the question of whether a student is a customer should depend on which aspect of the education process is being investigated. In aspects that students may not have the necessary knowledge to provide input, they should not be viewed as customers. But, in aspects where the student is the recipient of non-academic campus facilities or processes, they can be regarded as internal customers [39].

Similar to faculty, non-teaching personnel working at bureaucratic styled institutions of higher learning, have not tended to view themselves as service providers or essential to student retention efforts. However, in today's competitive environment and era of instant information, the fundamental shift of power from seller to buyer forces organizations to change to stay competitive. This analogy can also be applied to universities. Training programs to develop service minded non-teaching personnel is required and a key component of this is investment in teaching personnel how to be professional and service minded [40].

D. University Promise

The final P of the 4 P's framework discusses brand promise which is related to brand equity. Brand equity is a concept that has developed in the marketing literature that attempts to quantify the relationship or attachment that a consumer has with a brand and although the term may be construed from differing perspectives, broadly, it is a measure of the strength of the customers attachment, a description of the associations and beliefs that the customer has about the brand, and can be considered as an asset on a company's balance sheet [41]. Nowadays, more corporate marketing strategies are being used by universities to differentiate themselves. Universities that can achieve a unified brand message can gain advantages in recruiting, retaining and building loyalty among students, parents, faculty and other stakeholders. In Thailand, more

universities are employing marketing strategies to differentiate their institutions. Private universities advertise heavily in various media such as print and social media. Sponsorship of events, radio programs and other tactics are also used. The offering of scholarships, laptop computers, and other fringe benefits have also been employed to attract potential students. Universities try to distinguish themselves by using wording in their advertisements such as 'creative', 'dynamic', 'international', 'cutting-edge', and 'high quality' to name a few of the adjectives employed. The utilitarian motive, where consumption is concerned with the functional or instrumental usefulness of the product or service, is the motive that universities, as educational institutions, employ. Students come to study and seek knowledge to prepare for their future careers, thus branding is related to personality dimensions of sincerity and competence [42].

Universities must approach brand building in a logical way including gathering information in relevant areas. They must understand how the university is perceived and how it wants to be perceived. This is best approached by obtaining data from students, parents, and other stakeholders. Linking brand promise and student retention requires that the university ensure that students have satisfactory experiences in the areas that are associated with the institutional brand, whereby these experiences should not be abstract or generalizations, but experiences that are uniquely provided to support the brand promise of the university [43]. For example, if a university promotes its image as being diverse and multicultural, evidence of diversity and multiculturalism should be apparent not only in its student body, but also in its faculty, in the social activities and experiences available, in the attitudes of tolerance and understanding of differences in teaching by faculty and service by personnel, to name a few areas.

v. Conclusion

The 4 P's framework for student retention strategy provides a practical approach that can be utilized in the context of Thai private universities. As a framework, its focus on the four areas of profile, progress, process, and promise, are concepts that can be readily understood and conveyed to all members of the university who need to be aware and involved if institution-wide efforts are to be successfully implemented. This is consistent with any initiative that requires that all persons in an organization be on board. The emphasis on marketing strategies is already utilized, particularly at Thai private universities. The student as customer approach is relevant and not unusual and may already be the organizational culture at some institutions. As private universities may tend to experience less of the bureaucratic impediments that public universities do, a business-like focus can be both efficient and profitable. Additionally, involving faculty in the shift to students as customers and involving them in retention efforts has benefits not only for the bottom line of the university, but benefits in teaching and learning for the students as well, as it requires faculty members to improve and develop their teaching skills to meet students' needs and expectations.



International Journal of Business & Management Study – IJBMS 2018 Copyright © Institute of Research Engineers and Doctors, SEEK Digital Library Volume 5: Issue 1- [ISSN: 2372-3955] - Publication Date: 25 June, 2018

References

- [1] The World Bank, 2015, World Bank Data, Thailand population from http://www.worldbank.org/en/country/thailand/overview.
- [2] National Economic and Social Development Board of Thailand, Human resources and social development statistics from http://www.nesdb.go.th/
- [3] K. Kirtikara, (2001). "Higher education in Thailand and the national reform roadmap," Invited Paper presented at the Thai-US Education Roundtable. Bangkok, January 9, 2001. Retrieved from: http://www.kmutt.ac.th/pi/backup/fileKK/higher%20Edu%20Reform5 20Roadmap.pdf
- [4] G. Savatsomboon, (2006). "The Liberalization of Thai Education: Point of no Return International," in Higher Education, No. 42, Winter2006 From:http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/ Number42/p9_Savatsomboon.
- [5] G.D. Kuh, J.L. Kinzie, J.A. Buckley, B.K. Bridges, & J.C.Hayek, (2006). "What matters to student success: A review of the literature," (Vol. 8). Washington, DC: National Postsecondary Education Cooperative.
- [6] J. Braxton, A. Hirschy & S. McClendon, (2004). "Understanding and reducing college student departure," ASHE-ERIC Higher Education Report: 3(30).
- [7] J. Bean, & S.B. Eaton, (2001). "The Psychology Underlying Successful Retention Practices," Journal of College Student Retention, 3(1), 73.
- [8] D. Hossler, M. Ziskin, J.P.Gross, S. Kim, & O. Cekic, (2009). "Student aid and its role in encouraging persistence," in Higher education: Handbook of theory and research (pp. 389-425). Springer Netherlands
- [9] G.D. Kuh, J. Kinzie, T. Cruce, R. Shoup & R.M. Gonyea (2006). "Connecting the dots: Multi-faceted analyses of the relationships between student engagement results from the NSSE, and the institutional practices and conditions that foster student success," *Indiana University, Bloomington*, 547556.
- [10] L. Hagedorn, (2005). "How to define retention: a new look at an old problem," In A. Seidman 120 (Ed.), College Student Retention: Formula for Student Success (pp. 89-105). Westport: Praeger.
- [11] V. Tinto, (2012). Completing College: Rethinking Institutional Action. University of Chicago Press.
- [12] D.H. Kalsbeek, (2013). "Framing retention for institutional improvement: A 4 Ps framework," New Directions for Higher Education, 2013(161), 5-14.
- [13] D.H. Kalsbeek, and B. Zucker, (2013). "Reframing retention strategy: A focus on profile," New Directions for Higher Education, 2013(161), 15-25.
- [14] B. Spittle (2013). "Reframing retention strategy: A focus on progress," New Directions for Higher Education, 2013(161), 27-37.
- [15] C. Schroeder, "Reframing retention strategy: A focus on process." New Directions for Higher Education 2013, no. 161 (2013): 39-47.
- [16] L. Harrison-Walker, L. Jean. "Strategic positioning in higher education," Academy of Educational Leadership Journal 13.1 (2009).
- [17] D. Kalsbeek, (2013). "The 4 Ps as a guiding perspective," New Directions for Higher Education, 2013(161), 101-113.
- [18] S. Prangpatanpon, (1996). "Higher education in Thailand: Traditions and bureaucracy," *International Higher Education*, (6).
- [19] R. Lao, A Critical Study of Thailand's Higher Education Reforms. Oxon: Routledge, 2015.
- [20] N. Pimpa, (2011), "Strategies for higher education reform in Thailand," in Simon Marginson, Sarjit Kaur, Erlenawati Sawir (ed.) Higher Education in the Asia-Pacific, Springer, New York, USA, pp. 273-289.
- [21] P. Praphamontripong, (2008), "Inside Thai Private Higher Education: Exploring Private Growth in International Context." PROPHE Working Paper No. 12.
- [22] D. Mala, "Pisa test rankings put Thai students near bottom of ranking," in Bangkok Post, December 8, 2016.
- [23] S. Tangkitvanich (2013), "Teach Thais to think," Thailand Development Research Institute website. http://tdri.or.th/en/tdriinsight/10045/

- [24] J.E. Richmond (2007). "Bringing critical thinking to the education of Developing country professionals," International Education Journal, 8(1), 1-29.
- [25] H. Boylan and D. Saxon (1999). "What works in remediation: Lessons from 30 years of research," Prepared for The League for Innovation in the Community College. From: fhttp://www.hawaii.edu/offices/cc/docs/goal_a/What_Works_in_Remediation.pdf
- [26] V. Tinto, (2012). Completing College: Rethinking Institutional Action. University of Chicago Press.
- [27] A.Varelas, K.S. Wolfe & E. Ialongo (2015). "Building a better student developing critical thinking and writing in the community college from freshman semester to graduation," The Community College Enterprise, 21(2), 76.
- [28] V. Pitt, D. Powis, T. Levett-Jones, and S. Hunter (2012). "Factors influencing nursing students' academic and clinical performance and attrition: An integrative literature review," Nurse Education Today, 32, 903-913.
- [29] V. Tinto, (1993). Leaving College: Rethinking the Causes and Cures of Student Attrition. (2nd ed.). Chicago: University of Chicago Press.
- [30] P. Khamcharoen and A. E. Hyle (2014). "Academic and social integration in freshman year," Retrieved from: http://tar.thailis.or.th/handle/123456789/878
- [31] R. Sittichai, P. Tongkumchum and N. McNeil (2009). "Discontinuation among university students in Southern Thailand," International Education Studies, 2(2), 17.
- [32] P.D. Umbach and M.R.Wawrzynski (2005). "Faculty do matter: The role of college faculty in student learning and engagement," Research in Higher Education, 46(2), 153-184.
- [33] J. Pattengale (2008) What Faculty Members Need To Know about Retention. The Teaching Professor National Broadcast/DVD. http://www.facultyfocus.com/online-seminars/what-faculty-need-to-know-about-retention/
- [34] J. Bean, (2005). Nine themes of college student retention. In A. Seidman (Ed.), College student retention: formula for success (pp. 215-244)
- [35] R. Styron Jr. (2010). "Student satisfaction and persistence: Factors vital to student retention," Research in Higher Education Journal, 6, 1.
- [36] M. Sirvanci (1996). "Are students the true customers of higher education?," Quality Progress, 29(10), 99.
- [37] S. Tangkitvanich & A. Manasboonphempool (2010). "Evaluating the Student Loan Fund of Thailand," Economics of Education Review, 29(5), 710-721.
- [38] T. Songkaeo and L.H.Yeong (2016). THF Literature Review. Head Foundation.From:www.headfoundation.org/featuredresearch/Final%2 0-%20Thailand%20PB.pdf
- [39] M. Sirvanci (1996). "Are students the true customers of higher education?," Quality Progress, 29(10), 99.
- [40] L. Inghilleri and M. Solomon. Exceptional Service, Exceptional Profit: The Secrets of Building a Five-star Customer Service Organization. New York: AMACOM, 2010.
- [41] L. Wood, (2000). "Brands and brand equity: definition and management," Management Decision, 38(9), 662-669.
- [42] K. Polyorat, "The influence of brand personality dimensions on brand identification and word-of-mouth: The case study of a university brand in Thailand," Asian Journal of Business Research Volume 1, no. 1 (2011).
- [43] D.H. Kalsbeek (2013). "The 4 Ps as a guiding perspective," New Directions for Higher Education, 2013(161), 101-113.

About Author (s):

Poonpilas Asavisanu is a faculty member at the Graduate School of Human Sciences, Assumption University, Bangkok, Thailand

